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CHICAGO:
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THE NATIONAL PROVISIONER

PUBLISHED WEEKLY

The Organ of the Meat and Provision Industries of the U. S.

Vol. XX.

NEW YORK AND CHICAGO, MAY 27, 1899.

No. 21

THE BRISTOL COMPANY, WATERBURY,
CONN.

Recording Thermometers, Pressure Gauges and
Electrical Instruments. Thermometers for Cold Storage
Rooms. Send for Circulars.

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Pork and Beef Packers and Lard Refiners,

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Manufacturers of the famous brand "PURITY" Lard.

Goods for Export and Home Trade in any desired package.

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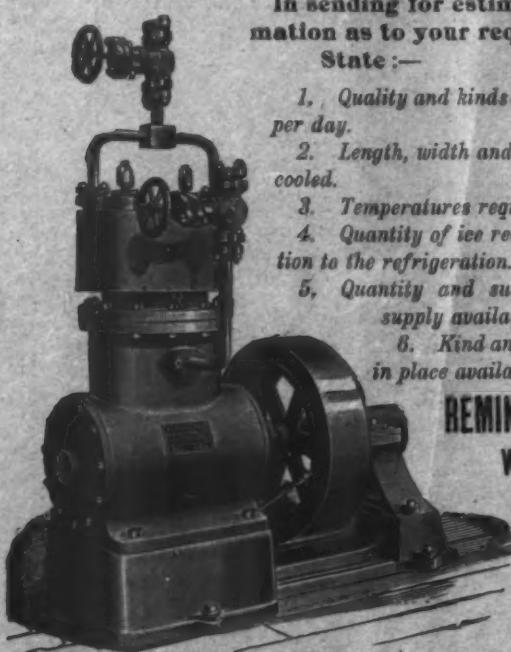
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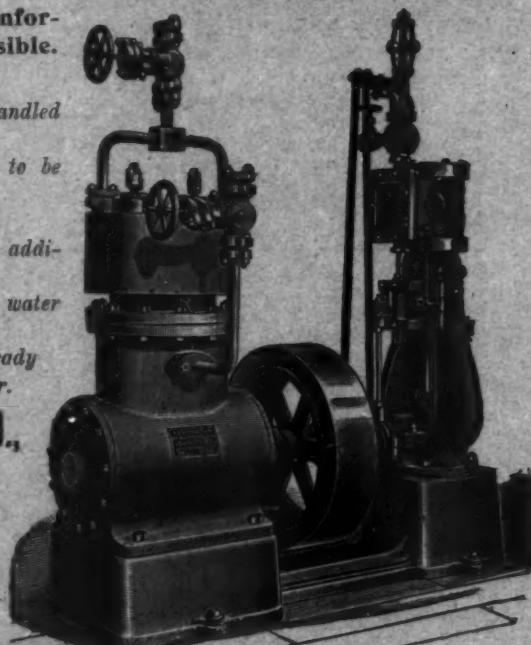
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IT KEEPS THEM FRESH, SWEET AND JUICY.

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For CHOPPED MEAT, CUTS, LOINS, HAMBURGER STEAK, ETC.
A white powder that gives Meat a handsome red color and keeps it sweet and wholesome.

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For BOLOGNA, SUMMER SAUSAGE, FRANKFURTERS, ETC.
Gives a handsome natural color that neither fades nor darkens.

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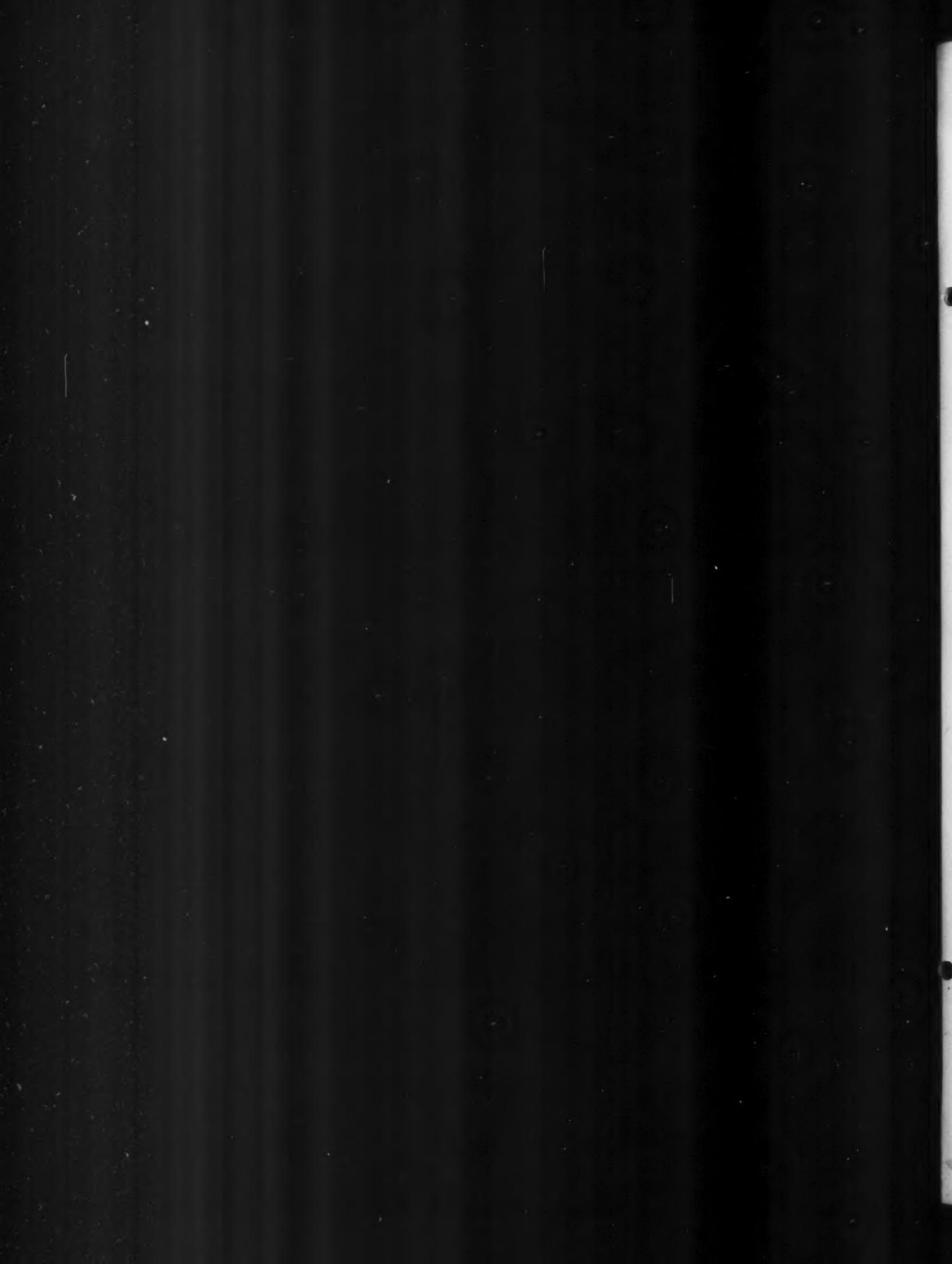
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SEE PAGE 5 FOR CLASSIFIED INDEX.

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SEE PAGE 7 FOR ALPHABETICAL INDEX.

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For Caulking Floors, for interior angles of Packing Cases, Tops of Railway Carriages, for coating the interior of Galvanic Batteries, and for other telegraphic purposes; for joints in Iron and Wood Gutters, also Ice House, Slaughterhouse and Stable Floors; for making refrigerators air-tight, and other purposes too numerous to mention.

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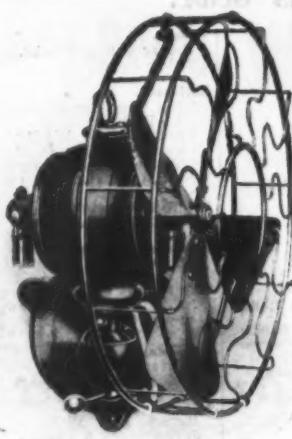
DETROIT.

BOSTON.

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			Want and For Sale Ads.



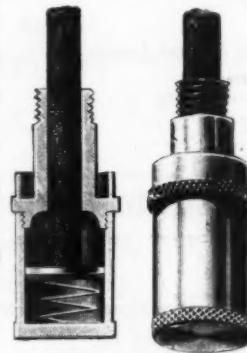
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472

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**The Only Small Machines
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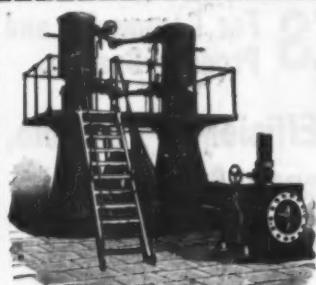
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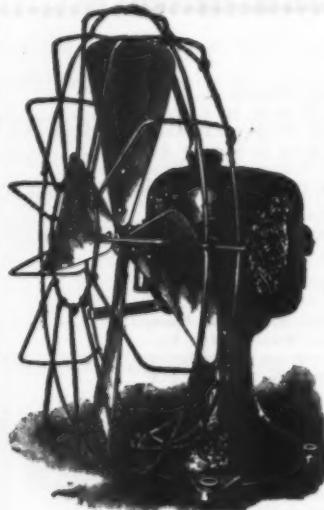


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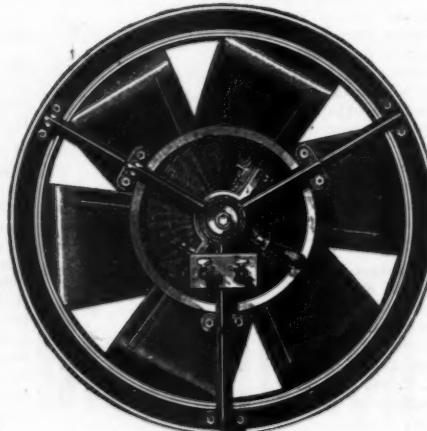
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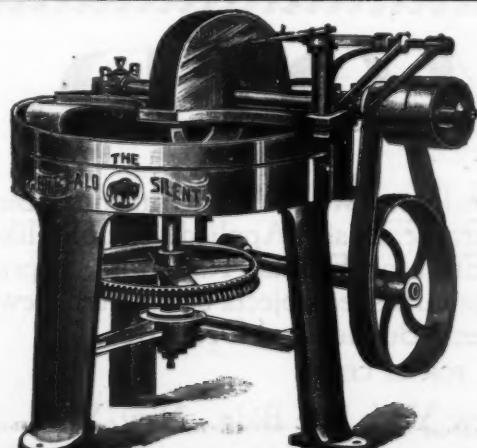
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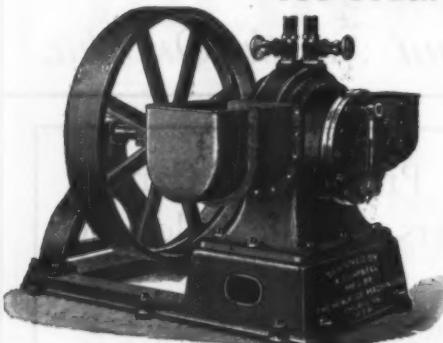
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AUSTRIA'S COMMERCE DRUMMERS.

It is a new thing for a government to set itself up as a commercial concern, and to go into the drummer business. In this high strung era of trade competition and the direct interest which a nation has to take in the business enterprises of its people such a thing is not only excusable, but it is commendable to a degree. A government when cognizant of its domestic needs, and of the energy necessary to advance its industrial interests abroad is justified in stepping aside for a moment from mere matters of politics and diplomacy to take a direct hand in the meat and bread affairs of its industrial classes in so far as these relate to foreign markets.

It has been left to Austria to set the commercial pace in this respect. "To improve the export trade of the country, the Ministry of Commerce, in view of present adverse conditions and threatening prospects," writes United States Consul Mahin, from Reichenberg, has laid before the Exporters' Association the government's plan for sending commercial travelers into the markets of the world. Summarized, this schedule is as follows:

1. It is proposed that technical experts be sent to foreign countries, to such places as themselves export the class of articles which the experts specially represent. Each expert must first demonstrate the necessary knowledge of languages and of the wares he is to represent, and must devote a certain time to studying the home manufacture of the article with which he is specially concerned.

2. Each expert will receive from the Austrian government for the first year of his service abroad 5000 to 8000 florins (\$2000 to \$3200), according to the expense to which he is subjected. He must during this year study the conditions and possibilities of this place, introduce the goods which he specially represents, and eventually procure and send orders to Austria.

3. The expert will receive from the principal whom he represents such additional compensation for business he creates and concludes as may be agreed on by contract between them.

4. For the second year, if his service prove useful, the expert representative will receive from the government an additional sum of 3000 to 4000 \$ (1200 to \$1600).

5. The ministry of commerce will bind every representative by a contract, in which the details of his work are set forth. His attention must be devoted exclusively to the Austrian export trade.

6. The business connection between the representatives and the Austrian industries shall be such as to insure direct communication with both individual firms and export syndicates. These syndicates, unions of various individual concerns, are for the purpose of gaining strength by harmony of action, of improving the credit of the firms belonging thereto, of preventing ruinous competition, and of aiding in the enlargement of the productive force of those firms. The government will relieve these syndicates of all taxes in their export business.

7. The business relations between exporter and representative abroad will be promoted through the medium of a home financial institution. It is to be insured against loss by elaborate provisions respecting the securities required for the use of its money.

If carried into effect, this scheme will make Austria the biggest trust and commercial combine in the world. While other political systems might look aghast at the boldness of the scheme American exporters, and our own government, may ruminate over the idea which, from a purely business standpoint, is a pretty good one, and is in line with the suggestion for a Department of Commerce which The National Provisioner has from time to time urged

upon the authorities at Washington. The internal charge that the Austrian ministry is truckling to the Tschechs and Poles does not destroy either the sense or the value of the general commercial idea of the novel plan.

The countries to be exploited by this army of national drummers are China, India, Egypt, South Africa, Asia Minor, Japan and the United States. There is a field for such enterprise whether it be undertaken by a government or by private concerns. The present era is certainly an active one in the missionary effort of civilized nations to proselyte the heathen Caucasian foods and methods.

COTTONSEED PROSPECTS.

The cottonseed oil mill and the farmer take divergent views of the cotton patch. To the cotton planter a short crop means higher prices for his lint, and for his seed, as both the factories and oil mills will need this stock for which a better market must be created by the stronger competition for the products. The oil mill man looks on a "big crop" as indicating a greater amount of seed for the seed mill at a lower price per bushel. A 600-pound bale of lint from seed cotton usually leaves 1000 pounds of cotton seed. If, then, the cotton growers have a total crop of 8,000,000 instead of 10,000,000 bales, the seed supply falls from 10,000,000,000 to 8,000,000,000 pounds, or a dead loss of 2,000,000,000 pounds for the season, which forces the crop to be purchased at an increased price. At the average price of \$5 per bale for seed the cottonseed crop costs the mills \$50,000,000 for the higher yield, and nearly the same price for the lower as the scarcity by the loss of 20 per cent of the total increases the value of seed to nearly that much.

The deficiency is much more than the apparent shortage at first sight shows it to be, because the actual loss is really doubled in as much as Southern farmers use an almost fixed percentage of cottonseed for re-planting and as a domestic fertilizer. Hence the total loss to the seed mills is from the market surplus up and above this consumption.

Present indications are that the cottonseed crop will be short. The reports from various localities show that a smaller acreage of cotton has been planted because of the rotting of seed in the ground and on account of the late spring, which also made it safer to sow the moist lowlands in corn. These same climatic reasons have caused a "bad stand" in many parts of the country, necessitated replanting in others, and so on. If, however, the summer is warm and moist the heavy fruiting of the plant will cover the deficiency, for a cotton stalk is like a tree, when well spaced and under favorable conditions it carries a load. This will give better development to the seed and make it a higher oil yield. The country along the Mississippi is pregnant with complaints of rotting seed, and scarcity of reserve stock with which to replant. If these winter hardships are not overcome by favorable summer conditions cotton will fruit short, and seed will be dear.

OILING THE WATERS.

Ships which lay tracks of grease on the ocean may in the near future be a reality if Hydrographic Officer J. W. Wilson is taken at his word. In the recent circular letter issued by him calling the attention of mariners to the efficacy of "pouring oil upon the troubled waters" he was not speaking a subsidized sentiment, but good commercial sense. Many a ship has weathered a gale by the use of oil, because the gale just fell down and slipped over. A cyclone stepping on a greased streak in mid-ocean is as dangerous a predicament as a fat man who strikes a banana peel on a flagstone. We've helped to grease a storm's anger out a bit once and, therefore, Mr. Wilson's advice to sea captains to carry oil mat and the lubricant at once appeals to us and reminds us of how our typhoon either skated out of sight or broke its back on the oily area in which our little craft bobbed up and down after having been tossed like a chip by angry waves under a howling gale.

If every sea craft carries this peacemaker in its hold, it will boom the oil trade a bit, but it will have its compensating pleasures in safer sea travel. A couple years of greasing may leave old ocean a broad oleogenous expanse, but we could even stand that as well as grease girded coast lines for the sake of a comfortable ride and a fair chance at the table to get even with the high cabin rate charged for a passage. "Thick and heavy oils are the best," says the hydrographer. He is of the further opinion that animal and vegetable oils are also the best. It may thus be left to the great packinghouse industries to feed the people, and then soften the anger of the storm so that people can keep their food after they have been fed. Cocoanut and fish oils congeal in water and, hence, are useless for wave-smoothing purposes. Will we yet get to pouring oleo and cottonseed oil on Boreas to soften his main?

WHAT DOES IT MEAN?

The government of New Zealand is losing no opportunity to take advantage of every prejudice of Europe against American products produced by recent utterances in this country. The European sensitiveness is evidently to be catered to at once by official action in the Southern colony. The agricultural department of that country, whose head is a responsible Minister of the Crown, has already made arrangement to have all meat intended for export stamped by the veterinary officers of the department.

As England requires no such stamp of inspection this action of the Agricultural Department of New Zealand indicates that the meat exporters of Maoriland intend bidding for the markets of the Continent and are possibly now looking over that field with a view to becoming energetic competitors of ours. This precaution makes this view doubly suggestive from the fact that Australian cattle are troubled with ticks which have become a plague in Queensland. There is no cattle plague whatever in New Zealand of which we are aware. The New Zealand sheep have hith-

erto also remained free from any discrediting affliction. We have expected a move in this direction for some time, but rather expected it to come from the Continent of Australia, inasmuch as the Lloyd and the Messageries lines of steamers trade there. These ships carry wool, and would naturally desire to cultivate as large a freight carriage as possible. As the cattle area of the colony is limited, New Zealand would never be a serious competitor for any length of time, except in crossbred sheep. The capacity of the country is limited, even in that class of meat, as it has a small area which its own active energies and industries are gradually filling with a white population which will likewise require feeding at home. Australia is 1200 miles away or four days travel by ship.

THE STILL HUNT FOR TRADE.

The commercial houses of every country are on a still hunt for markets. In the food world prospectors for trade are, figuratively speaking, looking down the throats of the eaters of every land while whispering the excellence of their products into their ears. Many half-civilized nations have not been opened to outside trade even after treaty ports flung open the door of commerce, because native prejudices have not been understood, and because native customs have not been understood either, nor native requirements catered to. Trade entering a new or a foreign country must travel according to the commercial laws, and social usages of that country. When a house has found out the way the people of a country buy and sell, and the "tricks of the trade" in that country, when a house also knows the food prejudices of other people and their dietetic ways, then that house will have a valuable piece of information for pushing its business among the folk of that land.

There are two ways to put food into a new country: Educate the people to what you have, and educate yourself to their needs as they feel them. This is true of the Filipinos, the Cubans, the Japanese, or any other people of ways diverse to ours. The facts now being gathered on these lines will clear the road for good new business.

That the United States really believes refrigerated beef to be an excellent article of diet is evidenced by the fact that in the recent call for 5,000,000 pounds of beef to feed the army in Cuba and Porto Rico the specifications require the proposals for refrigerated beef, beef cattle shipped to Cuba and slaughtered there, and for cattle bought in Cuba and Porto Rico for local slaughter. The interior garrisons have to eat freshly slaughtered beef because there are no refrigerators for keeping the meat. Refrigerated beef is preferred, for it is served where there are facilities for handling it. The garrisons have been eating the regular army diet right along since the surrender of Taral and the men are doing well. They have now become acclimated and inured to their surroundings. These conditions put a different taste in a soldier's mouth and a different tongue in his head. He feels better, eats better, and has less inclination for complaint and moaning.

NO ARMOUR ABATTOIR FOR NEWPORT NEWS.

Armour & Co., of Chicago, will build no packinghouse at Newport News. The statement daily occurring in press dispatches that Armour & Co., of Chicago, were negotiating for a tract of twenty-two acres of land at Newport News, Va., upon which to build an abattoir or a packinghouse for handling the Eastern end of their export business created some stir in trade circles. The persistency of the statement from usually well informed newspaper circles caused a number of inquiries, press and otherwise, to be made at this office. The National Provisioner, seeing no serious business necessity for such a move, treated the whole story as a news canard or trade supposition growing out of the fact that Armour & Co. has a regular business branch at Newport News, and that the company might resent the coming of the projected abattoir of the Newport News Abattoir Company by establishing one of their own. To set the whole matter straight, however, we took the report up with Armour & Co. The general management states that the report of their "erecting an abattoir is entirely without foundation, and they have no idea how it originated."

The only property Armour & Co. have at Newport News is one of their branch supply houses, which was opened for business last winter, owing to the great activity in the section. This is just a regular branch house, with a refrigerator, for supplying the retail butchers' trade.

OLEOMARGARINE IN ITALY.

Consul Jarvis, in a report to the State Department on oleomargarine in Italy says:

Under a law passed August 3, 1890, and still in force, all artificial fat products employed as substitutes for butter, not made out of cow's milk, must be sold under the name of margarin. The manufacture and sale of margarin are subject to strict regulations. Whoever intends to open a manufactory for oleomargarine must make an application to the syndico, stating the kind of materials used and the method of preparing the product. The manufactory must be subject to the inspection of the sanitary authorities, especially in regard to the quality of the oils used.

Every factory is obliged to have a trade mark of its own, filed and approved as the law requires, which, together with the word margarin, must be stamped on all the cakes of salable product, and on all the cases containing said cakes; also on each paper wrapper, and on the invoices, bills of lading, and books used in the administration of the factory. The retailers and sellers are likewise subject to the inspection, and they must inform the buyer that the merchandise is not butter, and must put it up in cases or wrappers with the word margarin printed in big letters upon each. Whenever the local conditions make it advisable, the syndico of any locality can prohibit the sale of margarin or other substitutes for butter, in the stores where butter is sold.

TRADE CONDITIONS IN AUSTRALASIA.

Consul-General John G. Bray, writing from Melbourne, Victoria, says of canned meats: In spite of the local canning, there is a large demand for American meat, which should be encouraged and stimulated by judicious advertising and efforts.

In oils and kindred lines, the United States has practically controlled this market for many years, and apparently will continue to do so.

Canned fish from the Pacific slope has absolute command of the salmon trade. The British exports are competing strongly in other lines. There is a very good opening here," says the consul-general, "for tinned, and other lines of fish, as the exigencies of the climate in the tropical lands cause an extensive consumption of these goods.

The Packinghouse

PROVISIONS AND LARD.

Weekly Review.

All articles under this head are quoted by the bbl., except lard, which is quoted by the cwt., in tcs., pork and beef by the bbl., or tierce, and hogs by the cwt.

LARGER RECEIPTS OF HOGS OFFSET INFERENCE OF FIRMER GRAIN PRICES — AT EASIER PRICES THE PACKERS ARE SELLING—A BETTER CASH DEMAND EARLY IN THE WEEK ON THE THEN FIRMER TENDENCY HAS GIVEN WAY TO QUIETER CONDITIONS.

Any strength which developed early in the week had not depended so much upon speculation as upon conditions of the market, which invited the belief that prices were about on the lowest point, and that there should have been for the near future, at least, comparative steadiness, if not slightly better figures. A decided advance, it was thought, then possible in the event of grain, more particularly wheat, feeling the effect of crop views and reaching higher figures. Whatever dispiriting effect the recent tendency of hog products has had upon the outside speculative element, there was the belief that it could be revived under a pronounced change to firmness for them, and that a radical tendency of wheat values might at any time stimulate the movement. But all of this improved feeling had to succumb on Wednesday and Thursday's trading through the then larger receipts of hogs, which turned the sentiment to weakness and declining prices, and which brought out selling by outsiders and in some degree by packers. Outside of the influence from grain early in the week on its hardening course, the hog products had to favor them an increased distribution on domestic wants and a slightly improved export demand. Of course, May and June are usually considered dull months on export demands, and, perhaps, this season will form no exception to the ordinarily accepted ideas concerning the trading, while on the other hand there are reasons to expect that shippers would become freer buyers at once if they felt assured that weakness was well out of affairs. In the first place, for consideration of a possibility of a larger trade than usual in the near future, is the fact that at current prices the consumption in Europe of both meats and lard is carried on in a satisfactory degree, while it is recognized that buying has been done in this country for resupplies in a very conservative way for several weeks, and that stocks in consequence in the continental and United Kingdom markets have been undergoing a steady reduction. The amounts held there must be of a moderate order, and under those of average seasons and as distinct in comparison from the exceptional large importations at this time last year, with which the movement this season at this time does not nearly approach. There is only the conclusion that export markets if they felt that their holding off policy was not likely to throw prices more their way, or if that there should be a stimulus of affairs here, at first started by speculation, that they would begin for this period of the year, earlier than usual extensive buying. While stocks of the products are rather heavy at the west, despite for some time

much more moderate receipts of hogs as compared with this time last year, yet they would not prove the factor they are at present, with any material recovery of export demands, while it looks as though the latter could be easily started with permanent strength established over the prices of the products.

That there is a feeling of uncertainty over near developments has been indicated by the greater indisposition to go short, and the sentiment much more extensively prevailing that "hog products are cheap enough and that they may in the near future do better." Hog prices still keep more than usual out of proportion to those of the products and the packers are unable to get them down materially at any time, while it looks as though they would be shipped forward less freely at lower prices than those current for them. It must mean that if hogs cannot be had cheaper, greater efforts than usual will be made soon in the near future to get profits out of the products, and that the packers must necessarily be arranged soon on the bull side of the market, while there would be no reason to expect additional bearish tactics in view of the present comparatively moderate holdings of outsiders and the inability to do much with the hog market. Besides the hog supplies are of especially desirable packing quality as a rule, showing good feeding despite the relative higher prices of corn, but on the latter account the unwillingness of shippers to submit to any lower prices for them. Next month should show a larger supply of hogs if prices are all right for them, while accounting in part for the much more moderate receipts this month up to this week than last year through the same period, is the fact that farmers had been this season more hindered in their farm work than then, although there is very little doubt but there are materially fewer hogs in the country than then, and that a larger supply of small hogs was shipped forward from the interior earlier in the season than last year to account for the recent diminished supply. However, unquestionably the farmers are now in a position to market their hogs more freely, while the latter half of the week in consequence has shown supplies of the swine in excess of those of last year, at the same time, and which have brought about the reactions in the products to weakness. But at any rate packers always by the 1st of July are more anxious over the prices of the products than considering the market for the swine, and whatever hesitancy over a development of strength may be shown meanwhile the feeling on the part of speculators is more assured over the later delivery and more particularly the September option, while it has enlarged a little over buying this week the later delivery. There is a strong belief, however, as before indicated, that the weakness is well out of the market, and that a nearer period for an improved situation is probable. Consideration is given the fact that there has been a material reduction of prices through two or three months, that they have been brought to a cheap basis for consumption, and that the latter is likely to enlarge within the near future, while it has for the week shown some improvement. Besides unquestionably, as aside from the fact that stocks have been permitted to run down on the other side, there is little doubt but that there are meagre holdings throughout the interior in this country and that resupplies will be need-

ed extensively before long. Indeed, some demands from the south, this week, have been necessarily earlier than usual by reason of short supplies held there, while for meats particularly there have been enlarged home demands for a few days.

In New York the English exporters have been a little more interested over steam lard, and have taken two or three moderate quantities. The continent shippers have been only moderate buyers of refined lard. The compound lard trading has been a little better on home wants, while the prices for the product are quite firmly held by reason of the firm cost of oleo, and the better supported rates for cotton oil. The city cutters have been able to market loose hams at higher prices, for which they find increased demands, while holding prices of shoulders and bellies at steady prices, for which latter they have only moderate demands, and which includes a little interest from continental and English shippers. The West India trading here has been a little livelier, but it calls for the most part for small lots, and indicates a very conservative policy on the part of buyers there.

Exports from the Atlantic ports last week were hardly more than half of the quantity of the corresponding time last year, and about 10,000,000 pounds less of meat than then, as follows: 5,002 bbls. pork, 12,180,310 pounds lard, and 14,543,125 pounds meats, against same time last year, 5,059 bbls. pork, 24,052,920 pounds lard, and 24,871,600 pounds meats.

Export sales in New York this week have been 1,000 tcs. western lard, 550 tcs. city lard, 200 boxes bellies, 125 tcs. do., and 100 boxes backs.

Beef, city extra India mess has been taken up moderately by English shippers, and is offered at \$13.50, at which 300 tcs. were sold. Barreled grades have fairly active distributions; mess quoted at \$8.50@\$9.00; packet at \$9.00@\$9.50; family at \$9.50@\$10.50.

Beef hams are offered at \$19.50 in car lots, and are more freely dealt in.

Canned meats are in fairly active demand; corned and roast beef, 1 lb. cans at \$1.15, 2 lb. do at \$2.10, 4 lb. do at \$4.15, 6 lb. do at \$6.85, 14 lb. do. at \$14.50.

On Saturday (20th) hog receipts, west, 50,000; last year, 53,000. There were slight reactions from the firmness, under a dull trading, and the close showed declines for the day of 2c for pork, and 2 and 5 points for lard and ribs. In New York, western steam lard, \$5.32½; city do, at \$4.95. Refined lard, \$5.60 for continent, 6 for S. A.; \$7.10 for do. kegs. Compound lard, 4%@4%. Of pork, sales of 200 bbls. mess at \$8.25@\$9.00, 50 bbls. city family at \$10.50. In city cut meats, sales, 1,500 pickled shoulders, 4½@4½; 3,000 pickled hams, 8@8½; 10,000 lbs. pickled bellies, 5@5½; hogs, 5%@5%. On Monday, hog receipts west, 67,000; last year, 85,000. There were more hogs than expected at Chicago, and the early market was weak, with selling by Cudahy brokers; afterwards there was good buying and a sharp advance, with the close showing an advance for the day of 5c for pork, and 2 and 5 points for lard and ribs. In New York, western steam lard, sold at \$5.37½ for 500 tcs. for U. K.; 200 tcs. city lard at \$4.95. Refined lard, \$5.60 for continent, 6c for S. A., \$7.10 for do. kegs. Of pork, sales of 150 bbls. mess at \$8.25@\$9.00; 75 bbls. city family at \$10.50; short clear at \$10.00@\$12.00. Hogs at 5%@5%. In city cut meats, sales of 1,250 pickled shoulders at 4½@4½; 20,000 lbs. pickled bellies, at 5@5½ for 14 lbs. to 10 lbs. average. Hogs at 5%@5%. On Tuesday, hog receipts, west, 76,000; last year, 78,000. The products opened firm on smaller receipts hogs at Chicago than had been estimated, but an advance brought about selling by the packers

and with grain prices eased off, closing for the day 2c higher on pork, and unchanged to 2 points lower on lard and ribs. Armour was reported as a good buyer. In New York, western steam lard at \$5.37½; city do at 5c. Refined lard at \$5.60 for continent, 6c for S. A., \$7.10 for do. kegs. Compound lard, 4½@4¾. Of pork, sales of 150 bbls. mess at \$8.25@\$9.00; 50 bbls. city family at \$10.50; short clear at \$10.00@\$12.00. In city cut meats, sales of 1,500 pickled shoulders at 4½@4½; 2,500 pickled hams, at 8½@9; 20,000 lbs. pickled bellies at 5@5½. Hogs at 5%@5%.

On Wednesday hog receipts, west, 102,000; last year, 90,000. The products yielded a little in price on the materially larger supply of hogs, and closed at small declines for the day, or of 2 and 5c on pork. On lard and ribs. In New York, there was little done, while the tone was easier on lard, but firm for city meats, more especially hams. Western steam lard, 5.32½c.; city do., at \$4.90@\$4.95. Other articles had not changed in price.

On Thursday, hog receipts west, 99,000; last year, 77,000. The products opened a trifle lower on account of the large receipts of hogs, and ruled with only thereafter slight fluctuations because of the strength for wheat. The close showed declines for the day of 7c for pork, and 5 points for lard and ribs. In New York, western steam lard at \$5.32½; city do., at \$4.90. Compound lard at 4½@4¾. Of pork sales 200 bbls. mess at \$8.25@\$8.75. 50 bbls. city family at \$10.50. In city cut meats sales of 1,500 pickled shoulders at 4½@4½. 10,000 lbs. pickled bellies at 5@5½.

On Friday another large receipt of hogs at the West, close to that of the day before, while their prices were lower, further weakened the products early; when these prices stood 2@5 points lower; the trading was slack. In New York Western steam lard was offered at \$5.25 and city ditto at \$4.95. No other change in prices.

OLEO AND NEUTRAL LARD.

Oleo oil at present is very strong for choice qualities at 47, and the supplies in Europe of the article very moderate.

The quality of oleo oil which arrives now in Europe is spring make, hence the best quality of the year, and is stored away for use later on, as it is oil that will keep well. The oil made during the summer months is not as good as spring oil, and when that comes to market the oil market will probably be lower.

Neutral lard is dull and neglected.

Mr. Coburn's Report.

The report of the Kansas State Board of Agriculture, of which F. D. Coburn is the gifted secretary for the quarter ending March, 1899, is issued, containing among other interesting material, valuable information of "The Modern Sheep." Says Mr. Coburn: "Nature seems to have planned Kansas as the theatre of the sheep's foremost achievements."

HATELY BROTHERS,
169 Jackson Street, Chicago.

**EXPORTERS AND
COMMISSION
MERCHANTS**
PROVISIONS, GRAIN, TALLOW,
OIL AND FEEDSTUFFS.

Exports of Provisions.

The exports of pork, bacon, hams and lard from the principal Atlantic seaboard, their destination, and a comparative summary for the week ending May 20, 1899, is as follows:

To	Week ending May 20, 1899.	Same week 1898.	Nov. 1, 1898.
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PORK, BBLS.

U. Kingdom...	1,355	831	56,793
Continent...	881	1,184	32,276
So. & Cen. Am...	191	381	12,412
W. Indies...	2,550	2,014	62,814
Br. No. Am...	95	640	9,368
Other countries	20	...	3,217
Total	5,092	5,059	177,880

HAMS AND BACON, LBS.

U. Kingdom...	11,341,987	18,975,111	412,442,584
Continent...	2,955,297	5,657,039	98,791,031
So. & C. Am...	72,625	172,300	3,292,752
W. Indies...	164,425	67,150	7,428,198
Br. No. Am...	8,800	...	255,425
Other countries	476,000

LARD, LBS.

U. Kingdom...	4,946,384	9,093,925	171,681,370
Continent...	6,163,076	14,153,025	214,976,260
So. & C. Am...	402,840	504,470	12,848,357
W. Indies...	595,410	290,220	15,743,823
Br. No. Am...	10,500	...	181,059
Other countries	62,100	...	1,405,820

Total

Total	14,543,134	24,871,600	522,685,990
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Recapitulation of the week's reports.

Week ending May 20, 1899.

From	Pork, Bbls.	Bacon and Lbs.	Hams, Lbs.	Lard, Lbs.
New York...	3,767	6,496,425	7,217,970	
Boston...	1,084	4,016,000	2,523,960	
Portland, Me...	...	750,225	32,000	
Phila., Pa...	...	640,200	80,215	
Balto., Md...	179	1,439,058	1,560,513	
New Norfolk, Va...	62	74,625	425,512	
Montreal...	...	1,117,601	156,600	
Pensacola, Fla...	69,650	
Total	5,092	14,543,134	12,180,310	

COMPARATIVE SUMMARY.

	Nov. 1, '98.	Nov. 1, '97.	Increase.
	to May 20, '99.	to May 21, '98.	
Pork, lbs...	35,576,000	32,000,800	3,476,200
Hams, B'n, lbs	522,685,990	567,668,393	...
Lard, lbs...	416,836,689	421,611,091	...

Decrease, Hams, Bacon..... 44,982,403

Decrease, Lard..... 4,774,402

New York Produce Exchange Notes.

The Produce Exchange voted to adjourn over next Monday, making holidays, over Decoration Day, from the closing of business on Saturday to Wednesday morning.

The annual meeting of the Exchange to receive reports of the Board of Managers and Treasurer, and to consider such other business connected with the affairs of the corporation as may be presented, will be held on Wednesday, May 31, at 2 p.m.

At the last meeting of the Board of Managers the following new members were elected: Allan K. Alexander, J. T. Campbell, Edwin P. Collins, D. Dessau, Charles L. Dreyfus, M. H. Duryea, George P. Jochem, Joseph T. Lilly, W. E. Sammis, James Van Raalte, Allen G. Oliver.

Proposed for membership: Henry Albert Lloyd (director American Produce Co.), by Perry P. Williams; John Asepegen (export and commission), by Walter Moore; Henry D. Smith (D. L. & W. R. R.), by George S. Hart; Samuel Wilmuth (S. Wilmuth & Co., livery), by Alfred Wilmuth.

Visitors at the Exchange: G. W. Eddy, Boston; George E. Blood and J. M. Taylor, Bristol; Charles Power, Seattle; H. L. Houghton, Baltimore; F. J. Webber, Buffalo; F. M. Pratt, Decatur, Ill.; Charles Procter and Ernest Procter, Liverpool; J. Romer, Antwerp; James H. Lee, Oxford, Mich.; F. Williams, Liverpool; J. M. Allen, Chicago; Thornton Lewis, Cincinnati; James Oliver, Montreal; W. S. Leitz and H. B. Osborne, Philadelphia; H. S. Kennedy, Minneapolis; A. M. Prime, Duluth, Minn.

German Meat Bill Deferred.

The adjournment of the Reichstag having been decided upon, further discussion of the German meat inspection bill will be deferred until next autumn.

Answers to Correspondents.

"BLOOD," N. Y.—Blood properly prepared should contain from 15.5 to 17.5 per cent. ammonia. (2) Yes, we have a good profitable way of making blood albumen, which we will sell you for a moderate consideration. Blood albumen is used largely by calico printers and for glazing purposes by leather manufacturers.

J. M., OREGON, ME.—Casings should be soaked for two days for this. (2) Forty per cent. of salt is too large a proportion of salt to buy with your casings. If you purchase from responsible and reputable dealers (you can consult our advertising columns), you need not be obliged to buy any such proportion of salt. (3) We will make such analysis for you for \$4.50, or if you have continuous work in that line, we will make you a special weekly or monthly rate. Many find such an arrangement greatly to their advantage and think that you also would. Write our Laboratory Department for terms.



To Lard, Grease and Tallow Renderers.

Has your lard a clear white color?
Has your lard a proper flavor?
Has your lard a strong odor?
Are you obtaining the full yield from your stock?

Do you have trouble in settling, bleaching, deodorizing or stiffening your grease, tallow or lard?

Are you getting from your stock the highest grade you should?

Are you getting dark colored grease or tallow from good high grade stock?

Do you want to obtain white grease from dark stock?

Are you getting all the grease, tallow or lard from your tankage?

Does your fertilizer heat when piled?

• • •

The above are but a few of many problems which daily confront the renderer. Should you have difficulty in any of your operations we will give practical suggestions and advice, gained by many years of experience in the large packinghouses of this country.

Practical advice by a practical worker given on these and other subjects in all its branches. Address

THE NATIONAL PROVISIONER,

(LABORATORY DEPARTMENT)

Official Chemists of the N. Y. Produce Exchange.

150 Nassau St., New York City.

U. S. Appraisers' Decisions.

The following decisions were handed down by the Board of Appraisers: May 18. J. B. Sageman, New York. The merchandise was reported by the local appraiser and by the collector to be hides of cattle, raw, and was assessed for duty as such at 15 per cent. ad valorem under Par. 437 of the Tariff Act of July 24, 1897. It is claimed to be free of duty as skins, under Par. 664 of said act. No evidence was offered by the protestant, nor does any appear in the record, showing the collector's action in the premises to be erroneous. His decision is, therefore, affirmed, the protest being overruled.

May 22.—Smith, Kline & French Company, Philadelphia. The merchandise is blue mottled hard soap in bars. It was assessed for duty at one and one-quarter cents per pound under Par. 72, Act of July, 1897, and is claimed to be dutiable at 20 per cent. under the same paragraph. Following G. A., 1832—the protests are overruled.

LIVERPOOL MARKETS.

Liverpool, May 26.—Beef—Dull; extra India mess, 60s.; prime mess, 55s.

Pork—Dull; prime mess, Western, 45s.

Hams—Short cut, 14 to 16 lbs., firm, 38s. 6d.

Bacon—Steady; Cumberland cut, 28 to 30 lbs., 31s.; short rib, 18 to 20 lbs., 29s. 6d.; long clear middles, light, 30 to 35 lbs., 29s. 6d.; long clear middles, heavy, 35 to 40 lbs., 29s.; short clear backs, 16 to 18 lbs., 28s.; clear bellies, 14 to 16 lbs., 28s. 6d.

Shoulders—Square, 12 to 14 lbs., firm, 23s. 6d.; prime Western, in tcs., 26s. 3d.; American refined, in pails, 27s.

Butter—Good United States, 65s.

Cheese—American finest white, steady, 51s.; ditto, colored, dull, 48s.; ordinary new, 47s. 6d.

Tallow—Firm; prime city, 23s.; Australian in London, 25s. 3d.

Cottonseed Oil—Hull refined. June-August, steady, 15s. 6d.

* The three largest exclusive poultry and produce dealers of the West have just effected a combination at Fort Scott, Kan., with a view to controlling the market in the seven States where they operate. They are K. B. Jean, of Wichita, Kan.; W. B. Hurst & Co., of Fort Scott, Kan.; and W. B. Redfearn, of Springfield, Mo., whose shipments of chickens and eggs alone amount to trainloads daily. They have incorporated under the laws of Missouri, with a paid-up capital of \$300,000. Each of the three concerns takes 666 shares of \$100 each, and Mr. Hurst as trustee takes 1000 shares. The remaining shares are divided among employees. The offices will be consolidated at Springfield, Mo.

MODESTY FORBIDS us to say that LARD PAILS make St. Paul FAMOUS, but it is a fact that more Tin Lard Pails are shipped from St. Paul annually than from any City in the WORLD, and we would be pleased to have you write the makers,

**THE HORNE & DANZ CO.,
ST. PAUL, MINN.**

Personal.

The National Provisioner was favored with a call from Mr. F. F. Wormer, president of the Austin Separator Company, of Detroit, Mich. Mr. Wormer has been in New York for some time on important business, and he reports that at no time during the last two years has his concern been so busy as at present. Their orders are not confined to America, but also extend to nearly all portions of the globe, where the fame of the Austin Separator has become favorably known, and justly so, because its merits have been advertised by those who have purchased the apparatus

nally came from Montevideo, having been thus shipped to New York consigned to Havana. The duties upon this consignment during the month of January amounted to \$10,803. During the month of February last 1308 bales, weighing 76,443 kilos., net, were imported to the City of Havana in steamers. Of this amount 308 bales came consigned from England and 1000 bales from Venezuela. There were also imported into Havana from Argentine in sailing vessels, loose, 317,642 kilos. of "tasajo" during that month. The total amount imported was 394,088 kilos., upon which duties amounted to \$15,605.—Journal of Commerce.

NOTES FROM CANADA.

The Board of Control of Toronto, Canada, have taken action regarding the agreement between that city and the Sunlight Soap Co., a draft of which was discussed and forwarded to Council, the terms being generally satisfactory to the Board. The terms of the agreement include that the Don improvement road between Eastern avenue and the G. T. R. tracks be closed and conveyed to the company. It is estimated by the City Engineer that the cost of dredging, paving, etc., required for the soap company's plant will cost about \$55,000.

The works of the National Fertilizer Company, in the Black Rock district, at Bridgeport, Conn., have been destroyed by fire. The loss is \$25,000.

The gin mill portion of the Jefferson (Ga.) oil mill plant has been injured by fire to the extent of about \$4000. Cause of the fire unknown.

The W. J. Wilcox

Established 1862

Lard AND Refining Co.

REFINERS OF THE CELEBRATED

Wilcox and Globe Brand of

PURE REFINED LARD.

**27 & 29 BEAVER
STREET,
NEW YORK.**

CHICAGO

WESTERN OFFICE OF
THE NATIONAL PROVISIONER,
RIALTO BUILDING.

Chicago Live Stock Review.

CATTLE.—Continued strong demand for beef cattle, on local and Eastern account, has consumed a liberal supply at this market during the past week and prices, if any different from last week have leaned rather to a higher level. We have not seen a nicer demand and better humor among buyers for months than that of the past week; supplies, which are running about 4,000 ahead of the previous week, have been closely bought up each day and all buyers have been out and after more cattle every morning. There have been some fancy beefs here that have been quickly taken for the Eastern markets at \$5.50 and one lot of fully finished, 1,460-lb. Angus steers made \$5.65; these, of course, are exceptional sales and only indicate the market for extra quality and finish, but there have been more steers selling at and over the even \$5 mark than for several weeks, the bulk of dressed beef, shipping and export cattle selling between \$4.90 and \$5.30 with very little being heard about "weight" where other qualities were not lacking. The strong call for fat cattle has reflected agreeably on the market for common light and coarse under fat steers that go to the cheap beef trade and they show as much strength as do the better grades.

The market is certainly in very agreeable condition and as long as the Eastern and export demand holds up to present proportions the trade can use around 45,000 to 50,000 cattle per week and sustain the present standard of values very nicely. It is well to caution the country grass feeding will soon show itself in more or less of the cattle arriving on market and a spread in the range of prices will naturally follow.

There is no particular change to note in the stocker and feeder branch of trade, the strong beef cattle trade has stimulated a fair degree of activity and the highest prices of the season were made. Tuesday for fancy yearlings but there has been no change in prices, good to choice light young stock being in best inquiry at \$4.60@5.00 with fancy yearlings making \$5.50, common to fair steers \$4.00@4.50 and stock heifers \$3.60@4.00.

The proportion of cows and mixed butchers' stock continues comparatively small, demand brisk and prices hold to a very firm basis. Choice dry-lot heifers have sold around \$5 and \$5.10 during the week and prime fat cows \$4.25@4.50, but bulk of heifers sell between \$3.85@4.40 and bulk of fair to choice cows \$3.40@4.00, with canners at

\$2.25@3.35. These prices promise to continue for fat dry-lot stock, but there will merely be a new range established as soon as grass begins to show in the cattle. Bulls of all kinds selling well and calves are about at high notch of the season at \$6.50@7.00 for good to fancy veals.

HOGS.—In the hog trade there has been continued tendency to increase the number being marketed here and at all the Missouri River slaughtering points, the quality being excellent and weight notably heavier than last year, when we had the record-breaking May run of 800,000. The demand is very good and prices have been well sustained, but, without improvement in market for the cured product it certainly looks that a long continued increase in the marketing must eventually result in a strong turn to lower prices for the live hogs; the strong beef demand and upward tendency in cattle prices may, perhaps, offset the natural effect of a low and inactive provision market by creating an increased demand for fresh pork with the mass of meat consumers.

The week's total promises to round out close to 175,000, and, while showing an increase of around 12,000 in the receipts compared with the previous week, the number taken for Eastern shipping account will show some falling off from last week's figures, thus throwing a larger proportion of the supplies into the hands of packers and local butchers. Notwithstanding this the market has been an active one and early in the week there was a strong up turn in prices, but a reaction setting in on Wednesday and prices dropping back nearly to the extent of earlier advance. The strongest demand is for smooth fat medium to heavyweight and a liberal proportion of such have sold at \$3.95@4.00 with a few at \$4.05, but the bulk of the crop for the week has gone over the scales ranging between \$3.80 and \$3.95, plenty of good ones at \$3.85@3.90. Pigs are very scarce on market and worth around \$3.40 for averages of near 100 lbs., while 140@150 lb. averages sell nearly up with the bacon weights. Stags and coarse sows are still neglected, doubtless will be poor sellers until next fall.

SHEEP.—The volume of sheep and lambs coming forward has been about the same or slightly heavier than for the previous week. The market was "red hot" on the opening day of the week and prices went to the top notch of the season, woolled Colorado lambs reaching \$7, clipped lambs \$6.60, yearlings, \$8.75 and prime sheep \$5.25 to \$5.50, but then prices have begun to look top-heavy and on middle days of the week there has been an inclination to lower prices, although no serious decline had been noticed up to the time of this writing. Conditions, however, seem to indicate that the top has been reached and it will be well for feeders and dealers to move cautiously. Prices are now 75 cents to \$1 per cwt. higher than a year ago, too high for exports to operate and are liable to drop severely in the near future. Spring lambs are selling at \$7.50 to \$8 for the good fat kinds.

CHICAGO RANGE OF PRICES.

SATURDAY, MAY 20, 1899.

Open. High. Low. Close.

PORK—(Per 100 lbs.)

May 8.12½ 8.15 8.10 8.10
July 8.22½ 8.25 8.20 8.20
Sept 8.35 8.37½ 8.35 8.35

LARD—(Per 100 lbs.)

May 5.05 5.05 5.05 5.05
July 5.12½ 5.12½ 5.12½ 5.12½
Sept 5.27½ 5.27½ 5.25 5.25

RIBS—(Boxed 25c. more than loose)

May 4.62½ 4.62½ 4.57½ 4.60
July 4.72½ 4.72½ 4.67½ 4.70
Sept 4.85 4.85 4.82½ 4.82½

MONDAY, MAY 22, 1899.

PORK—(Per Barrel)

July 8.17½ 8.25 8.15 8.25
Sept 8.35 8.40 8.30 8.40

LARD—(Per 100 lbs.)

July 5.12½ 5.15 5.10 5.15
Sept 5.22½ 5.27½ 5.22½ 5.27½

RIBS—(Boxed 25c. more than loose)

July 4.70 4.72½ 4.67½ 4.72½
Sept 4.80 4.85 4.80 4.85

TUESDAY, MAY 23, 1899.

PORK—(Per Barrel)

May 8.27½ 8.32½ 8.22½ 8.25
July 8.42½ 8.47½ 8.37½ 8.42½

LARD—(Per 100 lbs.)

May 5.12½ 5.15 5.12½ 5.12½
July 5.27½ 5.27½ 5.25 5.27½

RIBS—(Boxed 25c. more than loose)

May 4.72½ 4.75 4.72½ 4.72½
July 4.85 4.87½ 4.85 4.87½

WEDNESDAY, MAY 24, 1899.

PORK—(Per Barrel)

May 8.20 8.22½ 8.17½ 8.22½
July 8.35 8.37½ 8.32½ 8.37½

LARD—(Per 100 lbs.)

May 5.10 5.10 5.07½ 5.07½
July 5.22½ 5.22½ 5.20 5.20

RIBS—(Boxed 25c. more than loose)

May 4.72½ 4.75 4.72½ 4.72½
July 4.85 4.87½ 4.85 4.87½

THURSDAY, MAY 25.

PORK—(Per Barrel)

July 8.15 8.20 8.12½ 8.15
Sept 8.30 8.35 8.27½ 8.30

LARD—(Per 100 lbs.)

July 5.05 5.05 5.02½ 5.02½
Sept 5.17½ 5.17½ 5.15 5.15

RIBS—(Boxed 25c. more than loose)

July 4.67½ 4.67½ 4.65 4.65
Sept 4.80 4.80 4.77½ 4.77½

FRIDAY, MAY 26.

PORK—(Per barrel)

July 8.10 8.10 8.05 8.05
Sept 8.27½ 8.27½ 8.20 8.22½

LARD—(Per 100 lbs.)

July 5.00 5.02½ 5.00 5.00
Sept 5.12½ 5.12½ 5.12½ 5.12½

RIBS—(Boxed, 25c. more than loosed)

July 4.62½ 4.65 4.62½ 4.62½
Sept 4.75 4.77½ 4.75 4.75

Chicago Provision Market.

The legitimate provision situation is improving slightly. There was early this month some falling off in the hog receipts, some improvement of late in the shipping demand, and some reduction in the stock of ribs. The May hog receipts will be about 150,000 under last year's, but this falling off has been good in view of the large stocks and comparatively small foreign demand. The cash demand is not at its height before July. Quality of hogs keeps good. Old pork is being sold at \$1.35 under July, or at \$6.82½ per barrel. Old 70-lb. ribs are offered at 32½c. under July, while regular 70-lb. ribs are only 5c. under July. This discount for old product, presumably just as good as the other,

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**CLING-SURFACE MFG. CO., 190-196 VIRGINIA STREET,
BUFFALO, N. Y.**

and lacking only the speculative value because not deliverable on contracts, is pointed to by the provision bears as illustrating the rather unsatisfactory cash demand just at present. Provision professionals are quite generally talking sales of lard against purchase of ribs, declaring that packers are running now to the manufacture of lard because of its premium over ribs of about 50c. The hog that is coming this season is a lard hog, averaging almost 10 lbs. heavier than last year's, 233 lbs., average last week, compared with 224 lbs. last year. The provision market, however, is getting into a more normal condition, prices of product a trifle steadier in anticipation of next summer's demand, while prices of hogs are yielding slightly under the heavier run and the confident feeling that the June receipts will be very heavy. The packers are not quite so glum as they were over the situation at the yards, although there is nothing out there to feel exhilarated over. The belief is, though, there will be between 700,000 and 750,000 hogs in June, and if those figures are realized the packers will have a chance to put some hogs in their cellars at a reasonable price, perhaps, \$3.75. The expectation is that there will be an indifferent speculative market for some weeks to come, possibly somewhat lower prices if the expected increased hog run is realized and if corn sells off. The outsider continues to keep out of the market.

William J. Rogan, brother of John Rogan, whom the old timers in the provision trade well remember as an active broker twenty-five years ago, died last Monday. He retired from active business about fifteen years ago.

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DRY MECHANICALLY ALL FERTILIZERS.

It is a direct heat system.
NO STEAM. — NO ODORS.
THE F. D. CUMMER & SON CO., Cleveland, Ohio.

Average the previous week and a month ago, 229 lbs.; a year ago, 224 lbs., and two years ago, 236 lbs.

MEAT MONOPOLY IN SOUTH AFRICA.

The town council of Johannesburg, Transvaal Republic, South Africa, has granted a slaughterhouse monopoly in that city to an abattoir company. The concessionaire under this is permitted to charge \$5.04 for killing a beef and 34 cents a head for killing sheep. The present toll per head of stock before the granting of the concession was 48 cents per head for cattle and 4 cents per head for sheep. At the high charge in the abattoir company's monopoly based on the number of cattle and sheep now slaughtered, the fortunate party will receive about \$550,000 per annum. It is suggested facetiously that those who do not like the additional 10 per cent. embargo on meat, can eat bloaters. The Uitlanders (foreigners) hope that Oom Paul's recent dynamite concession will get under his new monopoly and blow it up.

G. M. Tucker has been in conference with business men in Greenville, S. C., relative to establishing a fertilizer factory there. He says he feels assured that the factory will be built and ready for operation by next season.

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THE NORTH AMERICAN TRUST COMPANY has been designated "Fiscal Agents of the Government of the United States," in Cuba, and has established offices at SANTIAGO and HAVANA, and is prepared to buy and sell drafts on and to make payments in Cuba, and to transact a general banking business.

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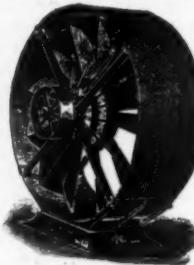
MR. HEYMANN WESTWARD HO!

The many friends of Mr. Samuel Heymann, who, for the past ten years, has been so prominently connected with Nelson Morris & Co., in New York, having represented them at the Produce Exchange and as general manager of the Eastern provision department during the past four years, will regret his return to Chicago the coming week, where he accepts a more valued and responsible position with this concern. There are few more justly popular men on 'Change and in the provision business than Mr. Heymann, who, by his courteous treatment of his business associates, and fair dealing, will be a loss to his friends with whom he has been doing business for these many years. The National Provisioner joins in their congratulations and best wishes for the continued success of Mr. Heymann in his new duties.

MR. HEYER OFF FOR SIOUX FALLS.

A. Lester Heyer leaves to-day with his family, if nothing prevents, for his home at Sioux Falls, Iowa, where he enters actively upon his duties as president of the A. Lester Heyer Packing Company, a \$4,000,000 corporation. The plant will be in full swing in the course of three or four weeks. It is a very large concern. The source of supply will be Chicago and the Northwest, while the markets of the world will be entered to. Mr. Heyer returned East a few days ago to pack up. The National Provisioner wishes Mr. Heyer and his enterprise that rich success to which his eminent experience entitles it. This superb plant was built but never operated. There are, therefore, much to add, and many odds and ends to attend to before the idle wheels will be given the order to go. Mr. Heyer, being a careful and a conservative business man, he will not start a wheel until everything is in ship-shape to go right ahead. When the Sioux Falls plant swings into the buzz and whiz of the great family of packing-house plants it will swing in to stay and to do business with good products turned out by proper appliances. A little item of 25,000 or 30,000 square yards of concreting is enough in itself to cause a delay. The first of July at latest will find this large concern regularly in the business. Sioux Falls has many advantages for such a factory and its pay roll will add to Sioux Falls. Butchers and caterers will soon be reading new brands of provisions.

* Col. S. G. Sharpe, in charge of the Chicago subsistence station, has received proposals for furnishing the War Department with 5,000,000 lbs. of beef for the troops in Cuba and Porto Rico, during the year beginning July 1 next. Five Chicago firms have offered bids.



PATENTS AND TRADE-MARKS GRANTED IN WASHINGTON.

624,907. CENTRIFUGAL LIQUID-SEPARATOR. Loomis Burrell, Little Falls, N. Y., assignor to D. H. Burrell & Co., same place. Filed March 7, 1898.

624,911. METALLIC BARREL. Jay G. Conderman, Rhinelander, Wis. Filed March 23, 1898.

624,957. TANK-BOTTOM DISCHARGE-DOOR. Lebbeus H. Mitchell, Salt Lake City, Utah. Filed Nov. 26, 1897.

624,958. TANK-BOTTOM DISCHARGE-DOOR. Lebbeus H. Mitchell, Salt Lake City, Utah. Filed Nov. 26, 1897.

624,989. STERLIZING RETORT. Frank W. Smith, Portland, Me. Filed July 23, 1898.

625,001. FILTER. Jacob Weidmann, Paterson, N. J. Filed June 17, 1898.

625,067. CREAM-SEPARATOR. Johan F. Schroeter, Copenhagen, Denmark. Filed Dec. 29, 1897.

625,072. FOOD-COOKING APPARATUS. Morgan S. Trumbo, Grahanna, Ohio. Filed Sept. 12, 1898.

625,119. CHURN. James T. Morse, Rippey, Iowa. Filed March 1, 1899.

625,134. BAG-HOLDER. John A. Anderson, Austin, Minn. Filed Sept. 12, 1898.

Designs.

30,790. HYDRAULIC-PRESS PLATE. Alexander Euston, St. Louis, Mo. Filed April 3, 1899.

Trade-Marks.

32,860. SUBSTITUTE FOR LEATHER CONSISTING OF PULP-BOARD. A. Wells Case & Son, Highland Park, Conn. Filed April 8, 1898. Essential feature. The word "Hideite."

32,884. CANNED FRUIT AND VEGETABLES. James Butler, New York, N. Y. Filed April 6, 1899. Essential feature.—The word "Eessie."

32,896. ABRASIVE SCOURING-POWER. Joseph Mortimer Johnson, Baltimore, Md. Filed April 17, 1899. Essen-

tial feature.—The pictorial representation of a White Squadron battleship.

32,908. FILTERS. Ch. Prevert & Cie., Paris, France. Filed March 17, 1899. Essential feature.—The representation of a swan.

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Cottonseed Oil Manufacturers.

Does your oil give trouble in refining?
Are you making too much foots or is your shrinkage too great?
Do you want to avoid the formation of free fatty acids in your stock?
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The above are but few of the many points constantly presented to the manufacturer. Small troubles, if not speedily corrected, increase to the point of actual loss in running your plant. Should you have difficulty in any of your operations, we will give you practical suggestions and advice, gained by years of experience.

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KANSAS CITY.

Live Stock Review.

The receipts, with comparisons, as follows:

	Cattle.	Hogs.	Sheep.
K. City past week.	23,200	68,105	10,810
Same week, 1898...	22,851	106,874	13,174
Same week, 1897...	30,235	94,154	22,010
Same week, 1896...	20,982	68,480	24,575
Chicago.....	45,900	164,000	71,300
Omaha.....	15,300	48,500	12,700
St. Louis.....	7,400	35,400	9,900
St. Joseph.....	4,700	39,400	5,000
Kansas City.....	23,300	68,200	10,800
Total.....	96,600	355,000	100,700
Previous week...	99,600	290,700	121,900
Same week, 1898.	100,700	424,100	111,200

Kansas City packers' slaughter:

	Cattle.	Hogs.	Sheep.
Armour Pkg. Co...	4,100	28,375	3,577
Swift and Company	3,902	19,954	5,160
S. & S. Co.	5,523	1,897	472
J. Dold Pkg. Co...	1,109	6,103	575
Fowler, Son & Co.	130	7,167
Total past week...	15,019	63,668	9,907
Previous week...	16,064	64,289	14,150
Same week, 1898.	14,203	83,655	9,487

CATTLE.—The market on Tuesday was the lowest day of the past week, after that each day saw an improvement in prices over the preceding one and on Friday, the closing day, they were 15c to 20c per 100 lbs. higher than the low point. The highest price for the week on 1312 lbs. average native steers, \$5.30. Plain, rough cattle were not in such good demand as fat and light medium on some days, but a good many sales at \$5 and over; native cows of 1198 lbs. average sold as high as \$4.30; both native cows and heifers touched bottom on Tuesday and were slow in regaining their strength; heifers of 756 lbs. average sold as high as \$4.82½; native bulls, a few sold at \$4.25, but bulk ranged \$3.50@4.00 for about 1300 lbs. average. A good portion of the receipts were Western range cattle and prices kept pace with native cattle; Western cows and heifers in very small supply; Western steers, 1320 lbs. average, \$4.90; heifers, 746 lbs. average, \$4.45; Arkansas steers, of 739 lbs. average, \$4.40; Colorado steers, of 1342 lbs. average, \$5; fed Texas steers, of 1100 lbs. average, \$4.70; 20 spayed fed Texas heifers, 605 lbs. average, \$4.35. The receipts in the Southern or Quarantine division were 89 cars for past week, against 63 cars previous week, and 58 cars corresponding week of 1898. Some 1245-lb. average steers topped the market at \$4.80. Prices closed all around were about 10c higher than on Tuesday. Texas cows of 1280 lbs. average sold at \$4. The stocker and feeder market for last few days of week were very active and the offerings were picked up pretty closely, at steady to stronger prices. Packers competed with purchasers for the heavy weights. Veal calves are in good request and

bring strong prices. The shipments of stockers and feeders for the week were 121 cars, against 151 cars for previous week, and 127 cars one year ago. Shipments of export cattle to the seaboard past week 182 cars, against 207 the previous week, and 86 same week one year ago. Among the largest purchasers were: Eastman, 827 head; United Dressed Beef Co., 729; Kraus, 595; Ackerman, 541; Schwarzschild, 476; Swift, 146; and Michael, 105.

So far this week the receipts on Monday 3246, Tuesday, 6670.

The market so far this week displays a good active demand for all offerings, at strong and steady prices. Notwithstanding the large receipts in Chicago there is no perceptible decline to be noted and trade so far is very satisfactory. The highest paid so far, 1322 lbs. average \$5.25. A fancy bunch of Colorado steers of 1244 lbs. average, also brought \$5.25. Native cows sold as high as \$4.40; veal calves are in active request and selling with a snap. Heifers, 715 lbs. average, \$4.90; native stags, 1288 lbs. average, \$4.90; veal calves are in active request and bring from \$6.00 to \$6.50. The receipts contain a good portion of Western range cattle. Fed Texas steers of 1099 lbs. average, \$4.80. Fed Western steers, 1337 lbs. average, \$4.90. Oklahoma steers, 1028 lbs. average, \$4.65. Receipts in the Southern Texas or Quarantine division are extremely small and bring strong prices. Texas steers, 1204 lbs. average, \$4.70. Cows, 1032 lbs. average, \$3.90. Bulls, 1482 lbs. average, \$3.60. Heifers, 595 lbs. average, \$4.20. Stocker and feeders in small supply, light weights selling quickly at strong to higher prices, with packers still competing with shippers for heavy feeders.

HOGS.—Thursday's market was somewhat higher than the day previous, as there were some of very good quality and a few fancy bunches of top hogs. Mexico was also in the market for heavy hogs of good quality. Market stood: tops, \$3.80; bulk, \$3.60@3.72½; heavy hogs, \$3.67½@3.80; mixed packing, \$3.60@3.67½, with light mixed selling \$3.55@

\$3.60; and pigs ranged from \$3.00 to \$3.50. On Friday the market showed strength and prices ranged 2½c to 5c higher on every grade, in spite of the fact that the quality was not so good as the day before. On Saturday the market closed a trifle easier, and while some grades remained steady, 2½c were taken off of others, with light mixed selling 5c lower. Prices stood as follows on Saturday: Tops, \$3.82½; bulk, \$3.62½@3.75; heavy, \$3.70@3.82½; mixed packing, \$3.65@3.75; light mixed, \$3.50@3.60; pigs, \$3.00 to \$3.50. The average weight of the hogs for past week was 214 lbs., against 210 lbs. previous week, and 210 lbs. same week last year.

This week the receipts were: Monday, 7312; Tuesday, 21,182; Wednesday, 18,872. While quotations were again lower by 2½c on Monday, still, taking the quality into consideration, prices are about steady. Some common Southern grades came to the market, and Mexico was in the market for choice heavy hogs, but could not supply her wants. Prices stood on Monday: Tops, \$3.80; bulk, \$3.60@3.75; heavy, \$3.70@3.80; mixed packing, \$3.65@3.67½; with pigs 5c lower and scarce. Although the receipts on Tuesday were very large, still there was a snap to the market and prices closed stronger, by 5c on tops, 5c higher on top heavies, with a range of \$3.62½ to \$3.70 on mixed packing.

SHEEP.—The sheep market throughout the entire week was very satisfactory to the shippers, prices advancing almost each day and prices on sheep were 15c to 25c higher, and on lambs 40c to 60c higher than previous week. Spring lambs of 61 lbs. average \$8.00; 474 Colorado lambs, 58 lbs. average, \$6.50; 325 clipped New Mexican, of 65 lbs. average, \$6.10; 203 clipped Utah fed lambs, 72 lbs. average, \$6; 194 clipped Texas, of 91, \$4.85.

Receipts this week were: Monday, 2223; Tuesday, 4547; Wednesday, 4256. Monday opened 10c higher on lambs and strong on sheep, and Tuesday 10c to 15c higher on lambs and sheep than Monday; 647 clipped New Mexican lambs, \$6.25; and 247 clipped Western lambs, of 82 lbs. average, \$6.50; 151 California lambs and ewes, 80 lbs. average, \$5; 93 Kansas lambs, 69 lbs. average, \$6.25. It is needless to say that sheepmen are highly elated over the turn of affairs.

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PACKINGHOUSE NOTES.

* The J. R. Neal & Co. fish curing establishment at Maverick street, East Boston, Mass., has been gutted by fire. Loss about \$2000.

* The Currier's grease factory at Congress avenue, Chelsea, Mass., has been partially destroyed by fire. It is owned by L. Richardson & Co., of Boston, Mass.

* Joseph F. Bradley, the architect, has made plans for a slaughter-house, to be built by G. Fillmeth at Front and Thompson streets, Philadelphia, Pa.

* The meat establishment of John Lechrist, at Dallastown, Pa., has been burned. The slaughterhouse was also destroyed. The loss is not known, there being no insurance on the building.

* Tenders will be called for on Siddall's plans for the St. Lawrence market improvement, Toronto, Canada. The extent of the improvement is limited to \$150,000 as passed by the council.

* George Karlo and John J. Leissner were placed under arrest at Maspeth, L. I., N. Y., and were held in \$500 bail each for slaughtering horses, and curing the meat contrary to the sanitary laws.

* Capitalists will build an extensive market in Scranton, Pa. R. Ernest Comegys, a real estate dealer of Scranton, has the matter in hand. It will be equipped with every modern market appliance.

* The T. D. Baker Company, of Portland, Me., has been incorporated for \$30,000 to do a general provision business. The corporators are: T. D. Baker, H. Curtis, Jr., M. E. Minard, of Boston, Mass.

* The contract for furnishing dressed beef to the Santee and Ponca Indians for the next fiscal year has been given to Fritz Eggert, of Niobrara, Neb., as follows: 60,000 lbs. at \$6.13, and 6500 lbs. at \$6.19.

* Efforts are being made by the citizens of Fitzgerald, Ga., to establish there a Fitzgerald Packing Company. The mayor is interested in the matter. This concern will kill and refrigerate cattle, hogs, etc.

* The Illinois factory of the American Glue Company, on Gross avenue, Chicago, was damaged by fire to the amount of \$35,000. The factory is part of the glue interests, of which D. W. King, of New York, is president.

* The Gloucester Fish Flavoring Preservative Company has been organized at Portland, Me., for the purpose of making and selling flavorings, etc., and canning fish. Capital, \$150,000. The officers are: George H. Drew, president, of Boston, Mass.; Hamilton Terrell, of Boston.

* General Ludlow, military governor at Havana, has abolished a grant given by Spain in 1794 to the O'Reilly family under which they were permitted to tax each head of cattle slaughtered at 50 cents, which amounted to about \$100 per day. It is calculated that the family have been enriched from \$3,000,000 to \$5,000,000.

* The Cudahy Packing Company recently made a shipment of canned goods to Zanzibar, Africa. Mr. Cudahy said that the export business in this line will increase during the summer. It is stated that shipments of this kind are as successful now as in the winter months. It requires about two months to ship to Africa and about thirty days to deliver in European ports.

* The Live Stock Sanitary Board at Guthrie, O. T., has appointed new inspectors, as follows: District No. 1, Ezra Maples inspector, Ponca City—Grant, Kay, Garfield, Logan, Payne and Pawnee counties. District No. 2, Joe Sherman inspector, Oklahoma City—Pottawatomie, Cleveland, Canadian, Oklahoma, Kingfisher, Blain and Lincoln counties. District No. 3, W. F. Cantelon inspector, Arapahoe—Woods, Woodward, Beaver, Day, Dewey, Custer, Washita, Roger, Mills and Greer counties.

FULL REPORT OF WAR COURT OF INQUIRY.

(Continued from last week.)

As no extreme emergency of time existed at the date of sailing of the several expeditions to Porto Rico, there would seem to have been no occasion for haste in connection with their embarkation, as was the case with the movement to Santiago in June. The transports were larger, and, to that extent, better adapted to the movement of troops and animals. As the voyages contemplated were short, and as it was not expected that the troops would be kept on board for long periods of time, the same arrangements were made for their subsistence as in the expedition to Cuba; no special facilities were provided for the cooking of food, and the troops were required to subsist on the travel ration.

The experience of the three detachments of the Porto Rican expedition was not quite the same. The first detachment, under the command of Major General Miles, embarked on July 9, and reached Siboney on July 11, but remained on board until it landed at Guanica and Ponce on July 25 and 27. It was thus confined on shipboard for about the same length of time as the first expedition to Santiago, and its experience with the canned fresh beef as an article of the travel ration was in many respects the same as that of the troops composing the Fifth Army Corps. As the voyage consumed considerably more time than was contemplated when the commands embarked, there was also some complaint of short rations toward the end of the voyage, especially during the few days immediately preceding the landing at Guanica.

The detachments under Generals Wilson and Brooke reached Porto Rico and effected landings on that island, the former in seven days and the latter in five days, from the date of embarkation. Short as their journeys were, however, there were complaints of the want of cooking facilities on the transports, as is evidenced by a reference to the voyage in General Brooke's report of operations, in which he says:

* * * I regard the transports as improperly fitted and unsuited to the work required of them. Particularly was this manifest in the means of cooking the food of the soldier.

(Report of the Major-General Commanding the Army, 1898, p. 189.)

The testimony as to the use of the canned fresh beef in Porto Rico is not uniform, and, to some extent, conflicting. It was used by the several expeditions as a travel ration, and, after the occupation of the island, as one of the fresh meat components of the field ration. Lieut. Col. A. L. Smith, the principal officer of the subsistence department at Ponce, testifies that his instructions in respect to the canned fresh beef were that it was not to be used if other fresh beef—either native or refrigerated—was available for issue. A small quantity of refrigerated beef was issued to the troops at Ponce and other seacoast points, and considerable quantities of native beef were issued to troops serving in the interior. The circumstances attending the use of the canned beef were decidedly more favorable than in Cuba, as all the troops serving in Porto Rico were furnished with proper cooking facilities, and there were frequent issues of potatoes and onions; these, with canned tomatoes, rice, and beans, constituting the vegetable components of the ration.

Complaint was made in some commands that the canned fresh beef was tasteless, unpalatable, in some instances repulsive to the sight, and at times nauseating. All of it had been acted upon by the intense heat of summer, and as it had been exposed to the climatic influences of the tropics for a considerably longer time than that used at Santiago an increased number of spoiled and swelled cans was reported. In other commands, composed of both Regular and Volunteer troops, there were no specific complaints, although the continued use of the canned beef was nowhere regarded with favor. Substantially this state of affairs was found to exist in a large number of camps and outlying stations by Colonel Huidekoper, chief medical officer, who inspected the sanitary condition of the troops in August and September, and, in performing that duty, examined the kitchens closely and observed with great care the kinds of food issued and the methods of their preparation.

Upon being asked to state the results of his



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H. R. BENNETT, 1217 Filbert St., Philadelphia.

observations in respect to the food that was used by the troops on that island, Colonel Huidekoper replies:

In the inspections in Porto Rico * * * I visited each cook tent, talked to the cook and such men as were standing there, and usually I was accompanied by an officer of the regiment, or sent for the commissary sergeant of the regiment, and asked for information as to their food. I saw the food and saw the cooking of it.

Q. Will you please state to the court, in narrative form, the result of your observations as to the fresh meat * * * —the canned roast beef—in Porto Rico?

A. During August, in the district of Guayanama, we had a few issues of fresh beef—that is, quarter beef—taken from the vessel. * * * We used comparatively little canned meat in that part of Porto Rico. We used native beef almost entirely. Later, on going to the western part of the island, the inland towns were in too far to use the fresh refrigerated beef. None of it was used in Ponce or Mayaguez, but in Mayaguez they were using native beef. In inspecting canned goods, which I did in the company kitchens, I saw tomatoes and other canned goods, and there was occasionally complaint of some of the goods being spoiled, but not official complaint. There were individual complaints of cans being spoiled, but no official complaint. The meat itself, the canned beef, as I saw it, was of a second quality of cuts, many of them showing tendons and fibrous tissues. However, that was variable. Some of the cans were good beef, and others were of a very inferior cut, showing that the meat had been cut off the lower part of the thigh or the fore leg, tendinous matter, or had come from the neck, fibrous matter. The majority were of a poor quality. * * *

Q. What can you say as to the amount of canned roast beef that was used in the company kitchens? Did you come upon it frequently or infrequently?

A. In my September inspections of the western part, I should say frequently—at Coamo, Utado; and at Ponce scarcely any of it, but at Las Marias, Aguadore, Larez, and San Sebastian they were using all native beef.

Q. How were they preparing it for use—the canned beef?

A. They were using it in a stew, like an Irish stew, with more or less water, and more or less vegetables added to it.

Q. What complaints did you hear of it?

A. I had no official complaints, but on inspection a number of cans, like those of tomatoes, were spoiled on opening.

Q. Did you get any data as to the percentage of cans that were found spoiled on opening?

A. No; I have not that data.

Q. In conversation with those about the cook tents that you inspected, with the enlisted men of the commands, could you obtain their opinion as to the canned roast beef as an article of food?

A. There was very little complaint as to the meat. Of the lack of vegetables there was considerable. I made notes daily of the inspection, which I reported to General Brooke daily. I recently went over the originals, and I could find nothing of importance regarding the meat. I find numerous complaints as to the lack of potatoes and onions and of the spoiling of the cans, but I find no direct complaints, nor do I remember any, and they certainly would have been noted if I had found them.

Q. Did you examine any of the cans of roast beef?

A. Yes, sir; frequently.

Q. Please state to the court what the result of your examination was as to the character and contents of the cans.

A. In some cases the cans appeared exactly the same as one sees boiled meat frequently in a small household in a stone jar, where the meat had been put away to serve for future use—a body of meat showing, and a surface of lard over it. Often that lard would be softened, yellowish, and sometimes gelatinous. This would be especially so in the poorer qualities of beef—that is, where the meat had been cut from a solid piece of beef such as would be used for a roast. The lard would usually be firm. Where the meat showed fibrous tissues, coming from the thigh, or

the foreleg, or the neck, in those cases it was frequently gelatinous and oily. However, the question of the hard lard or oily appearance would depend, to a certain degree, certainly, on the exposure which it had had to heat or the sun.

Q. Did you come upon any cans which seemed to have been unchanged; that is, that were in the same condition in which they left the packing establishment?

A. In good condition?

Q. That had not been acted upon by heat.

A. Yes, sir.

Q. What was their appearance?

A. Their appearance would be exactly the same as that which one would see in a crock of meat put away for future use—meat embedded in a mass of hardening lard.

Q. Do you use the term "lard" in a technical sense?

A. No; in the sense of melted fat.

The amount of refrigerated beef issued to troops in Porto Rico was not large. It appears in evidence that the steamer Massachusetts arrived at Ponce on Aug. 3 with a cargo of subsistence stores. The ship grounded at the entrance to the harbor, sustaining some injury to the pipes communicating with the refrigerator. The damage was repaired, however, prior to her arrival at Arroyo on Aug. 8. At Arroyo some 54,000 pounds of refrigerated beef were issued to the troops serving in that vicinity. The Massachusetts then proceeded to Santiago, when the remainder of her cargo was discharged, including about 146,000 lbs. of refrigerated beef.

On Aug. 5 the steamer Manitoba, which had been partially loaded in New York, completed her landing at Newport News, receiving on board, among other stores, 1,753 quarters (300,000 pounds) of refrigerated beef. She sailed from Newport News on Aug. 5 and reached Ponce during the afternoon of Aug. 10. The steamer grounded at the entrance of the harbor, where she remained until the troops and animals and a portion of her cargo had been taken off by lighters. Three days later she entered the harbor and anchored in a berth assigned her, about two miles from the landing place. Her arrival and the fact that the cargo consisted in great part of refrigerated beef was immediately reported to the commanding officer on shore.

Although there was a considerable force of troops stationed at Ponce, the average strength from Aug. 10 to 25 being 4,157, no issues of refrigerated beef were made. On Aug. 26 the steamer was ordered to Mayaguez with supplies for the troops at that place. She remained there until Aug. 31, and a few issues of beef were made, amounting in all to 5,494 pounds to commands having an average ration strength of 9405 men. On Sept. 1 she returned to Ponce and remained until Sept. 7, during which time 12,199 pounds of beef were issued to a command of 9,848 men. On Sept. 7, with the greater part of her beef still on board, the Manitoba was ordered to New York, carrying the Sixth Illinois Volunteer Infantry and an Illinois battery to that point for muster out of service. The testimony shows that the beef was in good condition on Sept. 7, the date of sailing to New York. Some days before reaching her destination, however, the beef began to spoil, and on reaching New York was examined and found to be so far advanced in decomposition as to be unfit for use.

The steamer was ordered to Montauk Point, where a board of survey was appointed to examine it. As there was some doubt as to the authority of the board to act, arising out of the question of ownership, no conclusion was



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Fig. B-8.

Fig. D-16.

reached, and the beef was finally transferred to the custody of Swift and Company, in New York Harbor. It is proper to observe at this point that the beef shipped on the Manitoba was, in strictness, an open-market purchase, the contractors agreeing to deliver it at Ponce and elsewhere in Porto Rico at the price named in the Santiago contract. It also appears that the original sailing orders contemplated the ultimate delivery of the beef at Santiago; the evidence fails to show that these instructions were brought to the attention of the military authorities in Porto Rico, by whom the destination of the vessels was finally changed to New York.

On July 26 Gen. Miles telegraphed the Secretary of War from Ponce that there were plenty of beef cattle on the island, but this telegram does not appear to have reached the War Department or the office of the Commissary General of Subsistence. On Aug. 2 he requested that no more fresh beef be sent as it could not be used more than a day from the coast. As this telegram was received on

Aug. 3, after the beef had been delivered at Newport News, it was deemed best to permit the Manitoba to sail, although a clause was inserted in her sailing orders changing her final destination to Santiago, at which place the residue of the refrigerated beef was to be delivered after the balance of her cargo and stores had been unloaded at Ponce. As a consequence of General Miles's request of Aug. 2 no more refrigerated beef was sent to Porto Rico until some time in December, when deliveries began to be made under a contract with Swift and Company.

THE CANNED FRESH BEEF.

Canned fresh beef, although known to the trade for many years, as is evidenced by its use in the United States Navy since the period of the civil war, has come into general commercial use only within the past twenty-five years. It was adopted as an article of the travel ration in 1878, the fact of its adoption being published in the army in General Orders, No. 50, Adjutant General's Office, of 1878. It was then made and sold and is still known to the trade as "Canned Roast Beef," but as the methods of its preparation, which will presently be described, were fully known to the Department at the time of its selection, it was designated in the order as "Canned Fresh Beef." The cans purchased by the Subsistence Department for issue to troops during the year 1898 were therefore labeled "Canned Roast Beef" or "Prime Roast Beef," though it has never been contended or represented that such cans contained beef prepared by any form of roasting process, or that they were prepared by any other method than that in use in 1878, when the article was added to the travel ration. The experience obtained as a result of the use of canned fresh beef as a part of that ration has been discussed elsewhere.

In the manufacture of canned fresh beef the Appert process is substantially followed—sterilization by heat and hermetical sealing being relied upon to secure its preservation as an article of food. It is sold under a general guaranty of soundness, the undertaking of the packer being to replace a spoiled can whenever presented, without limit of time, without reservation as to the place in which it may have been used, and without restriction as to climatic influences to which it may have been subjected.

The processes of manufacture in the several canning establishments which were visited by the court are so nearly the same that a single description will answer for all. The details of manufacture, however, are fully set forth in the report of Dr. W. D. Bigelow, the chemist who accompanied the court in its inspections. A copy of this report will be found in the appendix. (See Appendix 24.)

The meat for canning, either as corned or fresh beef, is taken, as a rule, from the fore-quarter of the animal, the other parts of the bullock being appropriated to other uses. At times, however, when the demand is sufficient to warrant that course, the entire carcass is used for that purpose. Under the act of March 3, 1891, as subsequently amended by the acts of May 20, 1894, and March 2, 1895, creating a system of inspection of meat products intended to be used in interstate or foreign commerce, the animals purchased for canning are twice examined by inspectors representing the Bureau of Animal Industry. One of these inspections takes place at the scales in the stockyards when the animal is purchased, the other—a rigid post-mortem examination—is made after the animal is killed. Cattle rejected at the first examination are killed and disposed of under the direction of a committee representing the local Live Stock Association and a return of the proceeds is made to the consignor. Carcasses rejected

at the post-mortem examination are placed in a tank under the observation and inspection of the inspector representing the Bureau of Animal Industry, who is required to witness their destruction and to certify to the fact in his daily report of operations. The result of the tanking process is to destroy the meat and offal to which it is applied, converting the contents of the tank into lubricating grease and fertilizer. The testimony shows that rejections are numerous, that the inspection is carried out in good faith, and that the purpose contemplated by the law, to determine whether such products are "wholesome, sound, and fit for human food," is substantially secured.

The animals, after being slaughtered and dressed, are conveyed to the chill room, where they are separated and classified, some going into trade as refrigerated beef and others being used for canning, drying, or corning. The meat selected for canning is cut into small pieces, placed in hot water, and boiled from fifteen to thirty minutes, the time of cooking being determined by the size of the pieces.

The water in which the meat is parboiled, prior to its being packed in the cans, constitutes the by-product of the canning process and is used in the preparation of soups and meat extracts. The loss in nutritive quality in consequence of the boiling is fully described in the reports of the chemist who accompanied the court in its inspections.¹

¹See Dr. W. D. Bigelow's report, p. 28, Appendix 24.

"Parboiling," therefore, or "shrinkage," as it is technically called, is practiced because to produce a marketable article it is necessary that beef be cooked before it is canned. As has been previously shown, it detracts nothing from the muscle-forming element of the meat. The only substances removed are water, fat, soluble ash, and meat bases. Of these, fat is useful in supplying fuel for body heat, and the meat bases have some value as a tonic."

After the meat has been boiled it is examined with a view to remove the gristle and tendons, after which it is weighed into cans and hermetically sealed. Prior to sealing, a small quantity of gelatine is added, and in some packing establishments a small quantity of salt also. The cans are then exposed to steam heat for from two to three hours at a temperature of from 215 to 225 deg. F., the time of exposure depending upon the size of the can. When the processes of cooking and sterilization have been completed the cans are punctured, the air is allowed to escape, and the vent is soldered in the usual manner. The cans which do not collapse after being punctured are rejected, the success of the process being determined by the collapse of the top and bottom of each can, due to the creation of a partial vacuum in the interior. The cans are then cooled by the application of water, and kept at a low temperature for several days to permit the hardening or settling of the contents. They are then packed for shipment in wooden cases. To each of these a certificate of inspection is attached, verifying the fact that the statutes regulating the inspection have been complied with.

It is proper to observe at this point that neither the statutes nor regulations which control the inspectors in the performance of their duties require them to follow the beef to the canning rooms after it has been inspected on the killing floor. Each carcass inspected is tagged or stamped by the inspector, but his duty, as prescribed by law and regulation, does not require him to ascertain, by personal observation, that the meat used for canning is selected from that which has passed the Government inspection. The entire process of canning the meat and packing it for the market is closely supervised, and the product is inspected at every stage of its manufacture. In spite of such supervision, however, a con-

siderable percentage of cans is found to be defective when the work of packing is completed. Such cans are rejected, the average percentage of rejections amounting to about one-half of 1 per cent. of the completed product.

On April 25, 1898, at the outbreak of the war with Spain, there was but little, if any, canned fresh beef on hand at the several subsistence depots. The question of its selection as an article of food to be supplied to troops that it was proposed to employ in Cuba had not been made the subject of serious or extensive consideration by any person or department charged, by law, regulation, or custom of service with the responsibility of providing subsistence for the armies in the field. Such steps as had been taken to ascertain its suitability for use in tropical climates are set forth in Colonel Weston's letter of March 24, 1898, to the Commissary General of Subsistence, in his report submitted at Tampa, and in a report submitted by Captain Ripley of an experiment conducted by him at that place under Colonel Weston's direction.

The packers and dealers in canned meats had received no orders or intimations that the canned fresh beef had been or was about to be determined upon as an article of subsistence for the troops in campaign. Their stocks on hand were not larger than usual for that time of the year. They were not prepared to make heavy deliveries, nor had they any reason to believe that any extensive purchases were likely to be made by any branch of the Government.

On May 9 the depot commissary at Chicago was asked how much canned roast beef he could procure within the next five days. On the 10th he replied that he could obtain 3,000,000 pounds within the time specified, at a cost of 11½ cents per pound. The purchase was effected on May 11. On the same day the additional purchase of 2,100,000 pounds was ordered. Of this quantity, 720,000 pounds were ordered to San Francisco for the equipment of the Manila expedition and 1,000,000 pounds to Tampa for the expedition to Cuba. Other purchases were made in New York and Chicago until 6,847,174 pounds had been acquired by the Subsistence Department, including 350,000 pounds delivered by Armour & Co. from a stock of their manufacture on hand in Liverpool and other points in the United Kingdom. No purchases were made after June 30, though considerable quantities, ordered in May and June, were delivered and paid for after that date. The purchases above described were made in open market, the prices paid varying with the demand, between 8½ and 15 cents per pound. The greater part of the beef was purchased by depot commissaries under orders from the Commissary General of Subsistence; in one case a purchase was made by the Commissary General direct. General Eagan explains this by saying that the department, by causing purchases to be made at several points, was bidding against itself.

Although the purchases were made in open market the inspections required by the regulations of the Subsistence Department were, in most cases, insisted upon. Those made in Chicago by Lieut. Col. O. M. Smith, amounting in all to 2,759,272 pounds, do not seem to have received the usual inspection, as is indicated by the following statement:

Q. Explain to the court what inspection they were subjected to.

A. They were not subjected to any. * * *

Q. Why not?

A. Because we didn't have time. There was not time. Then these goods were inspected by the United States inspectors and we purchased them in the way that the goods are usually purchased by merchants.

The quality of the canned fresh beef as issued and used by the troops is fully set forth in the testimony of the witnesses. With a

view to ascertain the effect of canning upon the nutritive value of the meat, as far as such a fact can be ascertained by scientific experiment, it was determined by the court to submit cans of the fresh beef that had been returned from the tropics to chemists of national reputation, with a view to cause analyses of their contents to be made, and a comparison instituted between the cans so submitted and the ordinary fresh beef which is sold in the public markets. To that end Prof. R. H. Chittenden, of Yale College, and Prof. W. O. Atwater, of the Wesleyan University at Middletown, Conn., were called to the assistance of the court in conducting the investigation.

The cans selected for examination and analysis formed part of a large quantity of canned fresh beef which had been forwarded to Porto Rico, whence it was transported to Havana, Matanzas, and elsewhere in Cuba for issue to the destitute citizens of that island. Of the stock thus collected in Havana some 700 cans were selected, in accordance with instructions issued by the Major General Commanding, and shipped to Washington. From this lot the cans intended for chemical examination were selected at random. Other cans were taken from a package identified by a company of the Ninth Regiment of Infantry as having been issued to it in Santiago, and one can was furnished by General Miles from several in his possession which had been received from commands serving in Porto Rico. To enable the cans thus selected to be compared with the current product of the packing establishments, six cans were secured in open market and forwarded for examination with the others. It is proper to say also in this connection that neither of the chemists knew which of the cans referred to him for examination had been received from Cuba and Porto Rico.

The results of these examinations are embodied in the reports of Prof. R. H. Chittenden (appended, marked 20) and Prof. W. O. Atwater (appended, marked 25). The experiments conducted by Prof. Atwater were more comprehensive than were contemplated in the instructions of the court and included a set of digestion experiments which are described at length in his valuable and interesting report. Dr. Bigelow accompanied the court in its investigation into the methods pursued in the canning of meats in the packinghouses visited in Chicago, Omaha, Hammond, and Kansas City. His report will be found to contain a résumé of the methods actually in use, together with a record of temperatures, the amount and composition of extractives, analyses of brines and gelatines, and an account of the quality and disposition of the by-products. It will thus be seen that the scientific test prepared by the court was made to rest upon cans of fresh beef which had been exposed to the climatic influences of the Tropics for a period of time considerably longer than that included in the term of service of any organization or command in either Cuba or Porto Rico; and a comparison was made between beef so conditioned and the fresh beef supplied to the public in open market.

The contents of all the cases, which consisted of boiled rather than roasted beef, were found to be perfectly sweet, with an odor of cooked meat. The beef in nearly all the cans appeared to have been softened by exposure to the heat, but apparently without injurious effect as to its quality; apart from this the meat contents were found to be in a good state of preservation in every case. No traces of preservative acids were found in any of the cans.

In appearance, flavor, odor, composition, and digestibility they were very similar to ordinary boiled beef. The principal nutritive

ingredients of meats are protein compounds and fats. The quantities of these in the specimens examined were such as have been ordinarily found by analysis in canned beef. The amounts are greater than occur in ordinary fresh beef. The reasons for this are that the bone which makes a considerable portion of the weight of ordinary fresh beef is removed in preparing the beef for canning, and that in the process of preparation the meat is cooked in such a way as to expel a small proportion of the water. The bones and the water have no special nutritive value, and the canned beef is, therefore, a concentrated product.

Each of the specimens of canned beef received from the court of inquiry contained, pound for pound, greater amounts of actual nutriment than any of the kinds of fresh beef in the form in which they are ordinarily sold in the market, including both flesh and bone. The explanation of this difference is that already stated, namely, that the canned beef had been freed from the bone and part of the water contained in the fresh beef.

The chief nutritive ingredients of beef, as of other meats, are the protein compounds and fats. These build and repair the tissues of the body and yield the energy needed for warmth and work. Aside from the protein compounds and fats, beef, like other meats, contains certain other valuable ingredients, but these latter occur in very small proportions. The chief are glycogen, so-called meat bases, and mineral salts. The total amount of glycogen in the fresh beef is generally a fraction of 1 per cent. of the total weight. The portion of so-called meat bases is not well known, but probably does not exceed 1 per cent., and is ordinarily stated at a much lower figure. The amount of mineral salts is also about 1 per cent., or less.

The glycogen of the meat, though valuable, is not essential for nourishment. The meat bases serve neither for the building of tissue nor for the yielding of energy. They are, however, commonly supposed to be valuable for their flavor and for their stimulating effect, though late experiments have thrown doubt upon their efficiency as a stimulant. They may also have other important physiological uses. That they are not necessary for nutrition is shown by the fact that they do not occur in such animal foods as milk or eggs, or in any vegetable materials, such as flour and potatoes, which make up the whole of the diet of great numbers of well-nourished people. The mineral salts are essential for nourishment. If meat were the sole diet and the mineral salts were removed from it, it would not long sustain life; but if the meat makes a part of an ample and diversified diet the removal of a part of the mineral salts from the meat would probably not be felt under ordinary circumstances.

The digestibility of the specimens from the court of inquiry was tested in experiments in which they were used as a part of the diet of young men in vigorous health. The results accorded with the chemical analyses, implying that these specimens did not differ materially from ordinary beef in respect to the digestibility of the important nutrients, protein, and fats, and their value for supplying the body with nourishment.

Each of the subjects at some time found the meat to pall somewhat on the appetite, and in one case this loss of appetite was quite marked and accompanied by a feeling of lassitude, which the subject was inclined to attribute to the meat.¹

The testimony shows that the canned fresh beef was generally found to be unsatisfactory to the troops; the canned corned beef, on the other hand, was always acceptable to both officers and enlisted men. It is proper to remark in this connection that, while the output of the latter far exceeds that of the former, both kinds of meat are made from beef of the same quality, at the same time, and from the same animals. Any objection, therefore, to the canned fresh beef on the ground of the quality of the meat used must apply with precisely equal force to the canned corned beef, the only difference between them being in the amount of salt used in their preparation.

It appears in evidence, and the fact is verified by the reports of the chemists, that some brands of the canned fresh beef contained a small amount of salt; and that in some cases salt appeared in such quantities as to give to the product the character of corned, rather

than fresh beef. It is also in evidence that the cans thus seasoned were, as a rule, preferred to those whose contents were entirely fresh. Apart from this, however, there seemed to be no general consensus of opinion as to the kind, or brand, of meat which was found to be more or less generally acceptable than any other.

The court has endeavored to make its inquiry into the keeping qualities of the canned fresh beef as thorough and extensive as was possible under the peculiar circumstances of the case. The witnesses who used the beef in Cuba concur in the statement that there were but few spoiled or tainted cans among those opened by them during the operations before Santiago. Some of the witnesses, whose testimony related to the use of the meat in Porto Rico at a later period, speak of an increase in the number of swelled cans which were issued to them in August and September. There is no testimony from any quarter that the contents of an unswelled or uninjured can were found to be tainted at any time. The court has derived considerable assistance in this phase of the inquiry from the testimony of those who have examined large quantities of the canned fresh beef upon several occasions subsequent to its original delivery and acceptance, and have reported the results of their examination.

Some of these examinations have been made by inspectors and other officers specially appointed for that purpose; others have been made by the packers or their representatives, whose testimony has been corroborated by that of disinterested persons or by documentary evidence in the shape of daily reports made in the regular course of business and at a time when no investigation was contemplated. Under this head fall the examination of several carloads at Port Tampa in May, 1898, under the direction of Colonel Weston, the overhauling of two cars at Jacksonville, first by Lieutenant-Colonel Guild and afterwards by the agent of Armour & Co. at that place, and finally the repacking of two lots of two carloads each at Kansas City by the Armour Packing Company, one having been returned from Mobile and the other from Jacksonville, Fla.

In addition to this, official inspections have been made by Lieutenant-Colonel McLeary at Santiago, and by Colonel Guild and General Ernst in Havana. In the latter case nearly 1,000,000 pounds of the canned beef were critically examined and a report of the inspection submitted to the War Department. The court itself has caused a number of cans to be opened in its presence and examined by witnesses who were undergoing examination. It has personally inspected a lot of nearly 700 cans, which had been selected from the stock on hand at Havana in January, 1899, under the instructions of the Major-General Commanding. The cans so inspected or examined had all of them been exposed to the climatic influences of the Tropics for considerable periods of time, but in no case did the number of swelled or tainted cans discovered greatly exceed in amount 1 per cent. of the entire number examined.

It has already been stated, but the fact may be restated here, that there is no testimony to the effect that any of the canned fresh beef supplied to the Subsistence Department since April 25, 1898, has been chemically treated or subjected to the action of preservatives of any kind save as small quantities of common salt have been added as seasoning to the product of certain packers. This subject is fully discussed in the report of Dr. Bigelow, who has made the subject of packing a matter of extensive inquiry.

In respect to the quantity of canned fresh beef purchased, the court finds it difficult to

¹Report of Prof. W. O. Atwater, of Wesleyan University.

escape the conclusion that it was excessive, unnecessary, and not demanded by the emergencies of the existing situation. Assuming the necessity of providing twenty days' supplies for the 70,000 men comprising the original Cuban expedition, and that it was also necessary to provide as much as sixty days' supplies for the 20,000 troops assigned to the expedition to Manila, the total purchase of 2,000,000 pounds would have been amply sufficient. In point of fact, nearly 7,000,000 pounds were actually purchased and delivered, a quantity far in excess of the actual or prospective needs of the military service, and to the detriment, rather than the advantage, of the public interests.

THE REFRIGERATED BEEF.

Although the methods of slaughtering cattle and converting their carcasses into refrigerated beef are simple and quite generally known, a brief account of the process now pursued may not be out of place at this point. The animals purchased for slaughter are driven over the scales at the stock yards, where they are weighed and subjected to a preliminary examination by an inspector detailed for that purpose by the Bureau of Animal Industry. The examination made by the government inspector has to do exclusively with animals which are to become the subjects of interstate or foreign commerce, or are to be converted into meat products with a view to their transportation to points without the territory of the State in which they are sold or slaughtered. State and city inspectors are also stationed at the stock yards, whose duty it is to make a similar examination of cattle for consumption within the limits of the State or city in which they are slaughtered.

An animal rejected at the ante-mortem inspection is killed under the supervision of a committee of the local Stock Yards Exchange by whom the carcass is effectually destroyed, the by-products disposed of, and an account of the proceeds rendered to the owner or consignor. The title to animals thus condemned and killed remains in the shipper and never passes to the packer unless a post-mortem examination is demanded and the result of such examination establishes the fact that the flesh of the animal is wholesome and fit for human food.

After the ante-mortem examination is completed the animals purchased for slaughter are driven to pens controlled by the purchaser, by whom they are killed, usually within twenty-four hours subsequent to their purchase. The carcasses are suspended from hooks attached to a trolley on the killing floor, where the hides are taken off, the entrails removed, the fat trimmed off, and the exposed surfaces washed with hot water. During this operation, every portion of which is performed by men working in successive gangs, the animal is subjected to a rigid post-mortem examination by a veterinary surgeon acting under the direction of the Bureau of Animal Industry. Diseased animals are rejected and suspicious carcasses reserved for more careful examination. In both cases yellow tags are attached, as evidence of the fact of condemnation. If the result of the inspection is unfavorable, the carcass is thrown into a tank heated by steam to a temperature considerably above boiling, in which the offal obtained from the animals killed during the day has already been deposited. At the close of the day's work, or when the tank has been filled, it is closed; live steam is then turned on with a view to a thorough conversion of the contents of the tank. After exposure for from nine to fifteen hours the contents of the tank are removed in the shape of lubricating grease and fertilizer.

The carcasses, after being dressed and

cleaned, are cooled until the animal heat has passed out of the body; they are then carried by the trolley to the chill room where they are weighed and tagged. If the animal is intended for export trade, tags are attached by the inspector to each quarter; if intended for interstate trade the inspector marks each quarter with a rubber stamp, as evidence that the carcass has passed the inspection required by law. The quarters selected for export are provided with covers of coarse cotton cloth, with a view to protect them from injury in handling while on shipboard. The carcasses remain in the chill room, at a temperature of about 35° F., until they are loaded into refrigerator cars for shipment to market. The cars are recharged with ice and salt at icing stations at least once while in transit, the frequency of icing depending upon the length of the haul, the season of the year, and the destination of the shipment. When the car reaches its destination its contents are transferred to a cooling house, where the meat is kept in cold storage until sold or otherwise disposed of.

With a view to provide a supply of fresh beef the troops then being prepared for service in Cuba and Porto Rico, the Subsistence Department, on June 7, 1898, issued an advertisement calling for bids for refrigerated beef, beef on the block, and beef cattle, to be delivered at such points in the island of Cuba as might thereafter be occupied by the military forces of the United States.

During the interval between the issue of the advertisement and the opening of the bids the question as to what kind of beef was best suited to the conditions that were likely to exist in Cuba was made the subject of inquiry in the office of the Commissary-General of Subsistence. An experiment with imperfectly frozen beef was undertaken at Tampa with an unfavorable result, and a test of beef treated by a process invented by Mr. Alexander Powell, of New York, was made under his direction at Port Tampa, just as the expedition to Santiago was about to sail; the results of this experiment were reported to the Department by Colonel Weston. Inquiry was also made of the producers of refrigerated beef with a view to ascertain how long such beef could be expected to keep in a tropical climate after being removed from the refrigerator.

When the bids were opened the proposal of Swift and Company, of Chicago, for refrigerated beef, being the lowest, was accepted. All other bids received for refrigerated beef, or for fresh beef on the hoof, or block, were rejected, and on July 1, 1898, a contract was entered into with Swift and Company for the delivery of refrigerated beef to troops serving on the seacoast of Cuba at 9.47 cents per pound. This contract contemplated the erection of refrigerators, at the expense of the contractor, at such points in Cuba as might be designated by the proper officer of the Subsistence Department. The beef was to be delivered on board refrigerating steamers at such seaports in the United States as might be agreed upon by the contracting parties and transported to Cuba, where it was to be unloaded into such refrigerating houses as might be constructed on shore by Swift and Company. From these shore refrigerators it was to be issued to the troops as required.

By one clause of the contract the beef was required to be "so preserved by the refrigeration on shipboard and at the refrigerator buildings above referred to that it shall be perfectly good and fit for use seventy-two hours after being issued from the ship's refrigerators, and twenty-four hours after being issued from the refrigerator buildings on shore." The requirements of the contract above cited constitute, in fact, a rule of accounting, the application of which, in the case

of a quantity of beef alleged to be unfit for use, would determine whether the loss should fall upon the United States or upon the contractor. If there were no refrigerating houses on shore then the terms of the contract would require the beef to be "perfectly good and fit for issue" for twenty-four hours after being issued from the ship's refrigerator. Under the terms of Clause II of the contract the responsibility of the contractor continues, after landing, for seventy-two hours after the beef shall have been stored in the shore refrigerators.

By a subsequent contract, dated August 8, 1898, made after due advertisement, Swift and Company agreed to deliver refrigerated beef at points on the seacoast of Porto Rico, the contract price in this case being 9.39 cents per pound. The requirements of this contract are substantially the same as those of the contract of July 1 for similar deliveries in Cuba. Under the first contract somewhat more than 2,000,000 pounds of refrigerated beef were delivered by Swift and Company to troops serving in the vicinity of Santiago, Cuba, and 75,343 pounds were delivered in Porto Rico in August and September. It has been seen that on the recommendation of the Major-General Commanding, dated August 2, 1898, shipments to Porto Rico were discontinued and were not resumed during the remainder of the year. This seems to have been the first intimation received by the War Department that the Major-General Commanding preferred native refrigerated beef as an article of supply for the troops serving in Porto Rico, a previous dispatch under date of July 26 conveying the information that beef cattle were procurable in Porto Rico, not having been received.

Although this recommendation gave rise to some embarrassment to the War Department, since two dispatches sent by the Major-General Commanding on July 13 and 18, respectively, had urged continuance of the Atlantic liners in service upon the ground of their great carrying capacity for troops, animals, and supplies, special mention being made of refrigerated beef in both dispatches—notwithstanding the apparent conflict in the recommendations of the Major-General Commanding—his request was adopted and shipments of refrigerated beef to Porto Rico were discontinued after the sailing of the Manitoba on August 5.

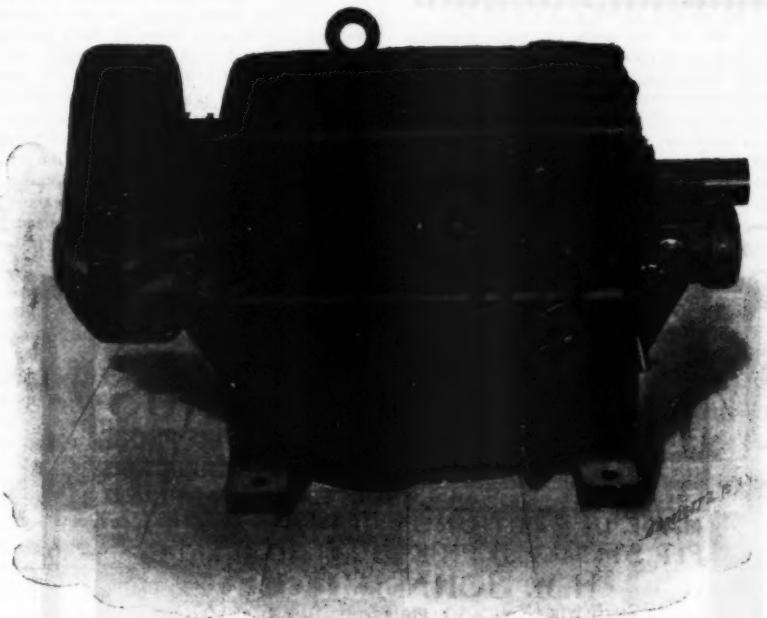
Before discussing the testimony in respect to the use of chemical preservatives it may be well to say a word in respect to the nature and operation of the several chemical agents said to have been used in the preservation of the beef. These are, as shown in the testimony, boric and salicylic acids, either alone or in combination, certain fluorides and formaldehyde. All of these are germicides, their preservative action tending to prevent fermentation or to arrest decomposition in the product to which they are applied. It is in evidence that boric acid is very generally used in the preservation of meats; its use is fully admitted by the packers in the preservation of certain pork products and meat sausages, such use being restricted to meat products which are not preserved by refrigeration. Salicylic acid, the fluorides, and formaldehyde are rarely, if ever, used in connection with solid foods, their chief application being in the preservation of liquids. Formaldehyde is a powerful germicide which is generally applied by some process of fumigation, and, as it has a pronounced taste and odor, its use is restricted to highly seasoned foods in which its presence is not likely to be detected.

(To be concluded next week.)

THE CROCKER-WHEELER ELECTRIC COMPANY'S MOTORS.

Bulletin No. 8 of the Crocker-Wheeler Electric Company is a most interesting and instructive contribution to the trade literature of the day. The bulletin is devoted to de-

dustry—these Motors being protected by enclosure from foreign substances which may be in the air, such as is always unavoidably characteristic of tanneries. These Mill Motors are, for the same reason, very serviceable in oil mills, packinghouses, glue works, soap works, fertilizer factories, sausage factories, etc.



CROCKER-WHEELER CO., Size 22 Mill Motor, Connections Side.

scriptions of mill, elevator, brake, car and shop motors. It is handsomely illustrated with half-tones. These specially interesting types of machines, as well as the high technical and typographical excellence of the pamphlet, commends it to every one interested in electrical apparatus, and because of the rapid strides to the front that electricity has deservedly made, there are few people who are not interested in this wonderful force, especially in the lines of trade covered by The National Provisioner.

The machines described in this bulletin are specially designed for exceptional operating characteristics, protective forms and controlling mechanism, which fit them particularly for all work requiring very great momentary turning power, safety from external injury or convenient automatic starting and stopping. The development of these types for the particular kinds of work following the universal acceptance of electric power is a natural case of evolution by which in time special types spring up for special purposes.

For demands which have sprung up for places requiring motors in the packinghouse capable of exerting great torque in starting and ready reversal, and protected by enclosure from foreign substances which may be in the air the Crocker-Wheeler Company makes the type known as its mill motors.

For places requiring motors that can be started automatically without rheostats and yet come up to the full speed by a regular rate of increase without depending upon the skill of the operator, the company makes Elevator Motors.

And for places requiring motors which when stopped, stop suddenly and automatically with any desired degree of precision, the company makes Brake Motors.

We mention these characteristics of the different styles of motors so that the various lines of trade reached by The National Provisioner may see at once just what particular kind of motor is best adapted to their needs. For instance Mill Motors will recommend themselves at once to tanneries and other in-

electric lights in the buildings, on account of the constant starting, stopping and reversing under full and partial loads. To stand the severe strains of reversing, the company has chosen a type like that of its Mill Motors, employing the same armature, size 22.

BRAKE MOTORS.

A liberal amount of space is set apart in the bulletin for the description and illustration of Brake Motors. The uses of these motors are very numerous, especially for cranes, elevators and hoists, where it is important to hold the load after it is lifted, and where it is important to obtain a sudden and accurate stop at a given place, instead of a gradual slowing down.

The Crocker-Wheeler electrical apparatus is justly popular among the vast army which employ the great force of electricity as a motive power and for other purposes, and in Mr. C. H. Wilmerding, the manager of the Chicago office, 1515 Old Colony Building, the company has a gentleman who is specially qualified for the exacting duties of such a responsible position. Mr. Wilmerding will be glad to receive communications from those who want to do business in his line. The latter will find in him a courteous gentleman, thoroughly posted on all electrical apparatus in general. He will also be pleased to send copies of the bulletin under review for the asking.

The manuscript for the bulletin was written by Dr. S. S. Wheeler, president of the Crocker-Wheeler Company. The facts set forth show the broad knowledge Dr. Wheeler possesses on electrical subjects.

The photographic and other work in its line was done by the Publication Department of the Crocker-Wheeler Company, of which Mr. G. H. Seward is in charge.

Russia is making many efforts to maintain and to improve the pork and hog product standing of that country. This is being done by improving the methods of the packing-



CROCKER-WHEELER CO., Size 22 Elevator Motor, with Automatic Switch.

bines the features of toughness and adaptation for constant reversal found in the company's Mill Motors.

Elevator work, as packinghouses, oil mills, sausage factories, soap works, glue works and fertilizer factories thus equipped well known, it is extremely severe for a motor and for the

house, and by improving the quality of the packinghouse hog. A recent effort in this direction was the importation from England of five Middle White boars and yefts to St. Petersburg. These were shipped from Hull and are superb specimens of the world-renowned herd of which they are bred.

Cottonseed Oil.

WEEKLY REVIEW.

Quotations are by the gallon, in barrels, in New York, except for crude in bulk (tank cars) which are the prices at the mills.

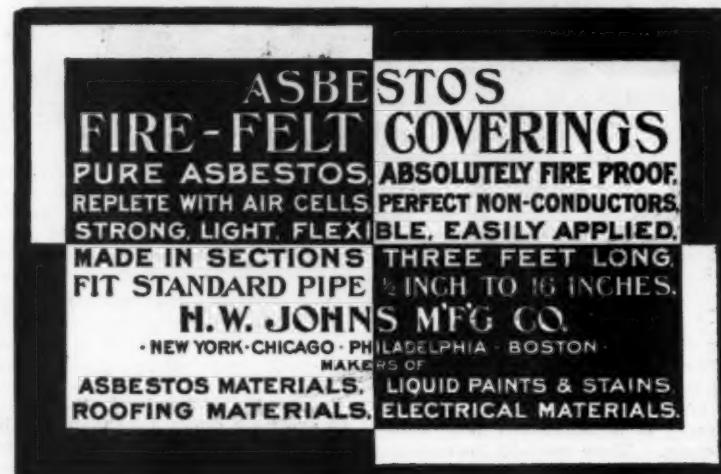
FIRMER UNDERTONE—LITTLE MORE FIGURING OVER SUPPLIES ON EXPORT ACCOUNT BUT HARDLY UP TO HELD RATES FOR LARGE LOTS.

The disappearance of most of the small lots from tank, and the steadily fewer arrivals of these limited quantities, throws attention more to important parcels without, however, transactions resulting. The exporters had been ready to take the light quantities that had to be sold at the difference in prices as compared with the held rates on larger parcels, while they are looking for more of them. By that much there is indicated a disposition of shippers to buy, with an unwillingness on their part only to respond to the better line of figures which prevail on more liberal lines. Moreover, the shippers in picking up the small lots have not kicked much over quality, taking soap grades and other qualities with equal freedom; the fact that they could be had for less money as against the held rates on important parcels has been the inducement, while exhibiting a greater desire to buy. They seem quite willing to go on in an unlimited way at the prices that prevailed for these small lots, but there for the present they stop. It looks as though the soap trade on the continent needed the cotton oil, particularly as it does not seem probable that it will be able to get sufficient supplies of tallow from this country in the near future. The beef fat product had been well bought up in the demands from the continent and England, and which stimulated the soap trade over the West to an extensive inquiry, and little accumulation of it can be made here or at the West in the near future. Meanwhile there are unsatisfied demands for the tallow, particularly from the continent, while it looks as though both English and Continental demands must remain in for it through the summer months, in consideration of its statistical situation all over Europe. This look of the tallow position naturally diverts interest in some degree to cotton oil. The soap makers at the West have been a little more anxious over any held supplies of the oil at the mills, and they have furnished bids of a less reserved order than through the previous week. But cotton oil can not be had at the mills anywhere near as freely as at this time in any previous season; in most sections the oil is well sold up, while in other localities there are moderate quantities only here and there, with few sections showing a supply that would permit a respectable-sized transaction; of course most of these holdings are distinctly soap grades of oil and permit the interest of the soap makers, while the buyers had the additional advantage of finding the mills not anxious over an extreme limit of figures on their future possibilities; this by reason of the desire to close completely the season's work. But the soap trade over the West is good, and with the possibilities of tallow keeping up to a full line of prices it wants all of the cotton oil that can be reached at late quoted prices, while it is not hopeful of securing a material supply except at advanced prices. There is little prime oil to be had anywhere over the South; the offerings of it thence upon this market are hardly more than small consignments in the

cleaning out of the mills of their season's work, while it is clear that if any sudden, if even only moderate, demand for it would send prices to a better range. The greatest drawback to an immediate important advance for good off and the better grades of oil is the position of the lard market. So long as foreigners see that lard fails to develop permanent strength they are likely to be cautious over meeting stronger rates for oil, or at least they are likely to hold off until they are

pushed into buying by the sharp falling off in their accumulations of oil.

That supplies have worked down in Europe to a point that is likely to start up demands thence at any time has been shown from the eagerness with which anything has been taken up here at the easier figures as compared with those for full quantities, while it has been noticeable that those people on the continent who had parted with some of their holdings in the belief that they could resupply easily to their advantage, have within the week been a little more anxious over the offerings here, while advancing their bidding a little. A good, healthy lard market would quickly bring the merits from the statistical position of oil into action, while pending a development of that order it is not possible to buy except at firm rates, and which are well supported for the week. The lard market for the present



E. H. FERGUSON, President. R. C. WAGGENER, Treasurer. E. B. MARTIN, Secretary.

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waits more upon a stimulus from wheat, in the influence from its short crop prospects than perhaps any other feature, and is depressed more from larger hog supplies, although unquestionably with permanently stronger prices for lard there would be a marked improvement to the export demand for it to making a healthier basis. The packers have less reason for easier prices for hog products than latterly, since they are unable to get hogs much cheaper, despite their increased supplies, while they have the bulk of the products, for which they should soon be seeking higher prices; the sentiment in a general way over hog products is that they are near if not quite upon bottom basis. But, however laggard the tendency for lard, the better grades of cotton oil must, on very ordinary demand, be all used up before a new season, while a spurring tendency of prices for them is possible at any time, or with a resumption of ordinary demands. The make of English oil is now small, and the markets on the other side are not able to fill in from England to any material extent, while it is possible that there may be further demand from England upon the makes here. The arrivals of oil upon the New York market this week have been small, and were mostly sold ahead; they included a few lots of off grade crude (no strictly prime arriving) and some small lots of about prime refined, but chiefly red grades of the latter. There have been sales here of 350 bbls. off grade crude at 20c to 21½c, 2000 bbls. red and about prime yellow at 24c to 25c, with prime yellow at 25½c, and choice ditto at 26c to 26½c, 500 bbls. choice yellow at 26½c, 600 bbls. winter yellow at 29½c, and 200 bbls. white, in lots, at 30½c.

On Thursday before the close of change the tone was very dull again because of the further decline in hog products by reason of the large receipts of hogs at the west. Good off yellow, in small lots on the dock would hardly have brought more than 24½c, and prime yellow for these small lots was quoted at 25c to 25½c. But the English markets were stronger, and except for the small lots here the holding is quite firm.

(For Friday's Closings, see Page 42.)

Cottonseed Oil at Havre.

The importation of cottonseed oil at Havre, France, has steadily increased during the last few years, owing to the falling off in the Indian crop of ground nuts and sesamum seed, which gives an oil used for soapmaking purposes, for which cottonseed oil is now used instead.

Plans are completed for the building of

the Maple Leaf soap factory at South St. Joseph, Mo., at a cost of \$4000. It is proposed to form a corporation with a capital of \$15,000. Messrs. Graham & Binnecker, experienced soap manufacturers, are to be at the head of the enterprise, and the machinery is to cost \$1100.

The Standard Soap and Tea Company of Bridgeport, Conn., has been incorporated with a capital of \$5000. The corporators are Moses Sagel, Joseph Mattes, E. L. Tuttle, L. M. Sagel, S. DeVorkin, A. M. Sagel, Max Cohen.

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McCullough's Phenyle Disinfectant, liquid or powder, destroys the ammonia in stables and purifies the atmosphere.

REFERENCES: Val. Blitz Brewing Co., Milwaukee, Wis., Anheuser-Busch Brewing Assn., St. Louis, Mo.

Hygeia Ice Co. of New York City, and all the prominent packinghouses.

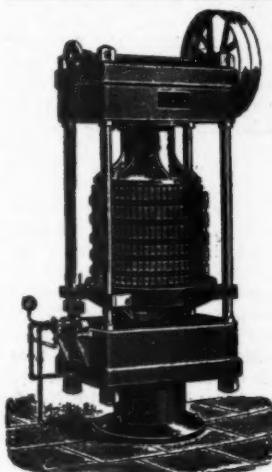
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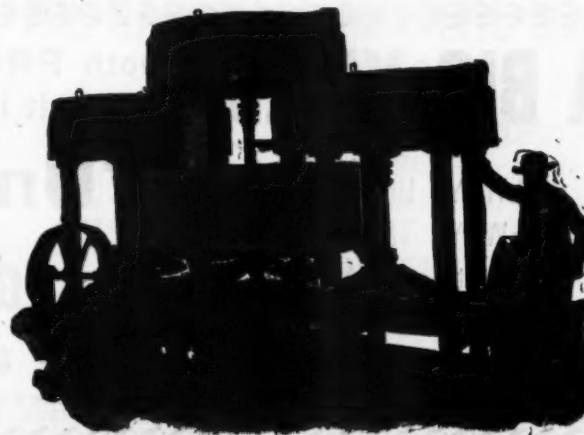
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Tallow, Stearine, Soap

WEEKLY REVIEW.

All articles on or this head are quoted by the lb. except animal oils, which are quoted by the gallon all in packages.

TALLOW.—Since the sale at the close of the previous week 4½c for city for 200 hds. there has been little done, but more by reason of well sold up supplies for this month's delivery, as there has continued inquiry at that price from both Continental and United Kingdom sources. But through last week there was vigorous buying over the West, which leaves the markets there poorly supplied in first hands. Thus at various points west, outside of Chicago, and chiefly at Kansas City and Omaha, there were fully 2,500,000 pounds taken, mainly by the soap trade, but including some of the lower qualities for export. Most of this business was done for shipment in tank cars, while there were besides 2500 tcs. taken at Chicago by exporters and soap buyers, chiefly city renderers there and No. 2 grade, with some of the former reported to have sold up to 4½c, and the No. 2 bringing 3½@4c, while the western markets are ½c higher for the week. But it shows that the home soap makers are alive to the fact that if they fail to take the supplies that the exporters will get ahead of them, while feeling that there is a material unsatisfied demand still from foreign markets. It looks as though exporters when they held off the market only recently in order to bring about an easier trading basis had exhausted their efforts that way, and that as the season has got so late, or so close to warm weather, that they are not in a position to try those tactics again, particularly as they would have to wait a considerable time before accumulations could be made of enough consequence to materially affect melters' views over prices. The situation looks decidedly strong, while it is quite certain that the near future will not give a supply large enough to permit material activity unless the exporters negotiate ahead of productions, and it is equally clear that on account of the inability to get sufficient supplies at once that buying will have to be carried along on export account to a later period than had been expected, and that the melters are looking for a livelier export business than usual through the summer months, in the necessity of making up from deficient supplies abroad. Besides this the soap trade over the

west is above the average for this time of year, and the consumption of tallow all around is of an exceptionally liberal order. It is quite probable that export markets will fight hard against the substantially advanced prices held, but thus far they have been willing to take up all of the nice stock offered and have been in competition with the home trade for it, although none of it has brought the outside figures now claimed. The asking price on city in hds. is 4½c, and nowhere is there a disposition among the city melters to sell less than this; at the same time up to the moment the best sale has been at 4½c, although 1-16c above that is now bid. It looks to-day as though the contracts for the week for about 250 hds. city will be taken in at 4½c, as the best previous sale. It would be possible to buy about 250 hds. city for early June delivery, but it is doubtful if more than 50 to 100 hds. could be had at once. There was no London public sale on Wednesday, on account of the celebration there of the Queen's birthday, but private advices from the English markets are of increased figures. There is not much country made as yet arriving, but it is thought that current prices will bring it forward more freely; the local soap demands while only moderate in connection with the picking out of the choice parcels of it for export, use it up closely. There have been sales of this country made for the week of 275,000 pounds at 4½c to 4½c as to quality, packages free, and move with 4½c as the outside. The Chicago market is quoted 3½c up, and at 4½c@5c for prime packers, 3½@4½c for No. 2 ditto, 4½@4½c for No. 1 city renderers, 4½c@4½c for prime country, and 3½@3½c for No. 2 ditto.

There was a sale in New York early in the week of 1,000 tcs. city, for export at 4½c. On Thursday, the bidding was advanced on city in hds. 1-16 to 4½c, while 4½c was asked; at 4½c, about 500 hds. could have been secured for deliveries in the early part of June. (For Friday's market see page 42.)

OLEO-STEARINE.—The fact that the market last week was upon a basis that permitted export demand, with some sales for export as then reported, in connection with the steady wants of the local lard refiners, who are compelled to figure over resupplies on account of their conservative buying for some time, has brought the price up this week ½c, and the market is now firm at 5½c, at which 100,000 pounds were sold. At the West there has been little done, where 5½c is bid and 5½c asked.

LARD-STEARINE.—The movement here to refineries is rather unimportant, but there is some export demand for choice city. Prices in the unimportant offerings of Western are for that class of goods wholly nominal, and at about 5½c, while for city the cost of lard determines the price.

GREASE.—The market is now fully sympathizing with the strength for tallow, nevertheless it is stronger than in the previous week, while there is an improved export demand, and some increase of trading on wants of the local presses. Sales of 175,000 pounds white at 3½@4½c and 200,000 pounds yellow at 3½@4½c. "A" white at 4@4½c, "B" imported into the City of Havana. Of this 4470 bales came consigned from New York, 200 bales from England and 20 bales from

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and Dealers in Pot Ash, Pearl Ash, Soda Ash, Caustic Soda and other Chemicals, Cocanat, Palm, Cotton Seed, Oil &c, Corn and Essential Oils, Tallow, Lard, Grease, Hides and Skins, Kosi's, Tar, Spirits, Turpentine, and other articles used by Soapmakers and other manufacturers.

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383 West Street,

white at 3½c, yellow at 3½@3½c, bone and house, 3½@3½c.

GREASE-STEARINE is held at a firmer line of prices, while showing more of a demand from exporters. White quoted at 4½c, and yellow at 4½c.

LARD OIL.—There has been more of a disposition to buy this week on the part of the larger eastern mills, who had allowed their accumulations to run low through the recent period of uncertainty in the lard market, while slightly encouraged over buying since by its steadier tone. Besides this there has been a better distributing business in small lots. The market has a more regular look, with 41c to 45c quoted.

CORN OIL.—The exporters are showing some interest, and the accumulations on offer are not material, while there is more or less demand for future deliveries. Quotations are \$3.45 to \$3.75 for large and small lots.

(For Friday's Closings, see Page 42.)

Soapmaking in Japan.

In early times the people in Japan depended on foreign supplies of soap, and though the article was duly manufactured in that country, still a fictitious label in imitation of foreign soap had to be affixed to it ere it could find a sale in Japan. Since then, however, great improvements have been effected, and the value of the manufacture has considerably increased. At present Japanese soap is said by some to rival the imported article, both in quantity consumed and in quality. There are some sixty or seventy soap manu-

factories in Tokio, which supply the home demand, whose output aggregates in value some 600,000 yen annually. Other manufacturers in Osaka and Kobe not only supply the demand for soap at home, but also export it to Corea and China.

THOMAS-ALBRIGHT CO.'S PRESSES.

Attention is invited to the hydraulic tankage and fertilizer press manufactured by the Thomas-Albright Company, of Goshen, Ind.

This same style press is built in five sizes, ranging in weight from four thousand to twenty-six thousand pounds each, with a working pressure of from eighty to four hundred tons. They are constructed almost entirely of iron and steel and are warranted in every way. The smaller sizes can be operated by either hand or power, but the larger sizes are for power only.

Following are some of the latest purchasers of these machines: James Boland, Jackson, Mich.; Star Tankage Works, Mount Carmel, Ill.; H. Kohr's Packing Company, Davenport, Iowa; Thomas Mertz, Richmond, Ind.; Nelson, Morris & Co., East St. Louis, Ill.; J. F. Faber & Co., Peoria, Ill.; George Agle & Sons, Bloomington, Ill.; D. H. McDowell & Co., Des Moines, Iowa; John Hartman, Freeport, Ill.; Charles Wolff Packing Company, Topeka, Kan. A complete list of the users of their presses, headed by Swift and Company, Armour & Co., etc., will be furnished on application to the manufacturers. Parties who are interested should write to Thomas-Albright Company, Goshen, Ind., who will be glad to send catalogue describing their presses more fully and will cheerfully furnish estimates at any time.

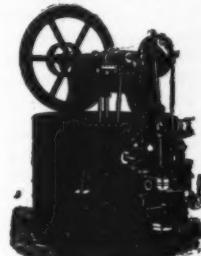
* Recently S. D. Ryan has made an effort to reopen the Ryan packing plant and is steadily pushing that project. Located up at Sixteenth and through Sycamore streets, Dubuque (Ia.) has a packing plant in full operation. The business was started two months ago, is improving at a very satisfactory rate, and the prospects are bright.

W. J. GIBSON & CO., General Commission and Export Dealers,

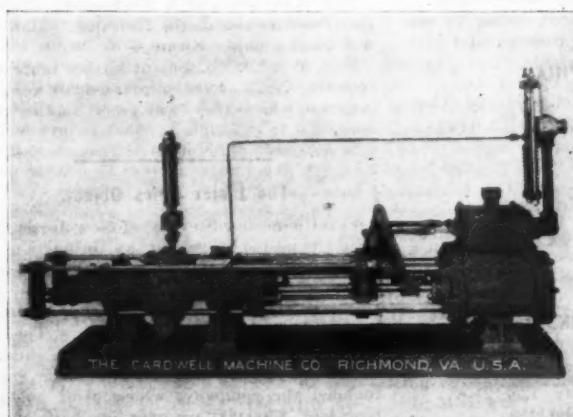
223 Rialto Building.

CHICAGO.

Tallow, Grease,
Stearines, Provisions,
Fertilizing Materials,
Beef and Pork Products
of all Kinds.



WE ARE ALWAYS BUSY
Designing, inventing and perfecting new devices in
Soap Powder, Toilet,
Scouring and Laundry
SOAP MACHINERY.
If you have trouble to compete,
let us show you how we can help you.
HOUCHEIN & HUBER,
25-45 Fifty-third St., NEW YORK, Brooklyn Borough.



THE CARDWELL PUMP.

THE CARDWELL MACHINE CO., RICHMOND, VA.

J. C. BURRUSS, Atlanta, Ga., General Southern Agent.

PIONEERS
IN THE
MANUFACTURE
OF

COTTONSEED OIL MACHINERY
HEATERS, PRESSES,
FORMERS, HULLERS,
CAKE BREAKERS, ROLLS,
CLEANERS, PUMPS,
SEPARATORS.

COMPLETE OUTFITS FOR COTTONSEED OIL MILLS FURNISHED.
OUR NEW UP-TO-DATE APPARATUS IS STANDARD.
WE LEAD, OTHERS FOLLOW.

WRITE US FOR INFORMATION. FOREIGN CORRESPONDENCE SOLICITED.

Hides and Skins

MARKETS.

CHICAGO.

PACKER HIDES.—Values are showing an easier tendency. This is probably because several of the more prominent buyers who regarded the existing figures as prohibitive have withdrawn from the market and their absence is naturally being felt. Though the present stocks are light, packers would doubtless like to dispose of their holdings.

No. 1 NATIVES. 60 lbs. and up, have not been an especially active factor. They offer at 12c.

NO. 1 BUTT-BRANDED STEERS. 60 lbs. and up, are very quiet and are nominally worth 11½@11¾c.

COLORADO STEERS. 60 lbs. and up, are now offering at 11¾c. The request is indifferent.

No. 1 TEXAS STEERS. are being offered at 12½@12½c. Both supply and demand is moderate and a definite offer might result in a slight shading of price.

No. 1 NATIVE COWS. free of brands, 55 lbs. and up, are worth 10½@11c.

BRANDED COWS. have sold in a small way at 11c. There are but few on hand.

NATIVE BULLS. are offering at 9¾c. They are in comparatively generous supply.

COUNTRY HIDES.—The country market, despite a tendency to fluctuate early in the week, is now strong in tone. We quote:

NO. 1 BUFFS. 40 to 60 lbs., free of brands and grubs, have sold in a small way at 9¾c; twos bring 9½c. Supplies are light.

NO. 1 EXTREMES. 25 to 40 lbs., now offer at 10c. The call is indifferent.

BRANDED STEERS AND COWS. are about the strongest factor in the market. They are worth 9½@9½c.

HEAVY COWS. free of brands and grubs; the few on hand are worth 9¾c; twos, 9½@9½c.

NATIVE BULLS. are worth 8½c flat and 9¾c selected.

CALFSKINS. 8 to 15 lbs., are worth 12c. They are pretty well sold up.

KIPS. 15 to 25 lbs., are worth 10c; a selected variety, 10½c.

DEACONS. range from 55c to 72½c, according to weight and selection.

SLUNKS. 25c.

HORSE HIDES. are in good request at \$3.40@3.42½.

SHEEPSKINS.—The market is closely sold up, with a marked scarcity of wool skins.

FRESH PACKER PELTS. \$1.00@1.25. **COUNTRY PELTS.** 55@80c.

RICHARD McCARTNEY,
Broker, Packer Hides,
Stearine, Tallow, Sheepskins, Cottonseed
Oil, Fertilizing Materials, Bones, etc.
Correspondence solicited.
Information cheerfully given. Kansas City, Mo.

Packinghouse Twines

And Paper shipped from the mills direct.
Samples and estimates furnished.

CHARLES RIBBANS,
231 Pine Street, Newark, N. J.

FRESH PACKER SHEARLINGS. 38@40c.

COUNTRY SHEARLINGS. 25@30c.
FRESH PACKER LAMBS. 70c@\$1.00.
COUNTRY LAMBS. 20@25c.

KANSAS CITY.

The small sales of hides during the past week has enabled the packers to catch up with their sales and all grades of branded stock are now represented in packers' cellars. Sales for the week, only 4000 hides, at prices on some grades which are remarkably high, and show an advance over former prices of 9½c. One large slaughterer reported sale of 1000 light Texas at 12½c; the trade, however, were inclined to be skeptical on this point, refusing to believe, as another packer sold 1200 light Texas at 12c. The writer, however, can state positively that they received this price. Both lots were of last week's slaughter. Sales of 1000 Colorados at 11½c, and a small packer sold 700 branded cows at 10½c. Sales could have been larger had packers been inclined to accept former prices. The slaughter of Texas steers and branded cows continues very light. So far this week only two sales to record, 600 heavy March native steers at 11c and 2400 May native steers at 12½c, lights 1c less. This has been the first purchase of May native steers on this market and takes the packers' slaughter up to date. Late April and May hides to date are still held by two packers in this city, probably 10,000 hides between them; one offering April, in connection with early May, 12½c, lights 1c less; the other asking 12½c, with lights 11¾c for April hides alone, refusing to quote Mays. Butt-branded steers are held at 11½c, Colorados at 11½@11½c, branded cows at 11@11½c, heavy Texas at 12½c, light Texas at 12@12½c, all of late slaughter. About 6000 early heavy native cows to date held at 11c. About 6000 April light cows to date offered at 11½c. Branded bulls, 8½@8½c; native bulls, 9½@10c.

SHEEPSKINS.—The last sales of shearlings were made at 35c, but packers are now demanding a notch higher, viz., 37½c. Very few wool pelts held, with no sales to report.

BOSTON.

BUFFS. are especially scarce. They bring in ordinary selection 9¾c. New Englands are also scarce at 9½@9¾c.

CALFSKINS. are in very short supply.

SHEEPSKINS. are scarce, owing to consumption abroad, and are consequently high.

PHILADELPHIA.

The market has been well sold up. There is a good call for all varieties. We quote:

CITY STEERS. 10½c.
COUNTRY STEERS. 10c.
CITY COWS. 9½@9¾c.
COUNTRY COWS. 9½@9¾c.
COUNTRY BULLS. 9c.
CALFSKINS. are high and scarce.
SHEEPSKINS.—Same condition as calfskins.

NEW YORK.

GREEN HIDES.—There are very few on hand and these command outside prices:

NATIVES. 60 lbs. and up, 12@12½c.
GRUBBY NATIVES. 11@11½c.
BUTT-BRANDED. 11½@11¾c.
SIDE BRANDED. 11@11½c.
CITY COWS. 10@10½c.

BULLS. 9½@9¾c.

CALFSKINS (see page 37.)

HORSE HIDES. \$2.00@3.25, according to weight, quality and selection.

SUMMARY.

Owing to the fact that many of the larger operators have withdrawn from the market values are showing a tendency to shrink. This is the old, old, story of the disparity of hide and leather values. Tanners claim that at present relative prices there is not only no incentive to buy hides but state that it is impossible to produce leather without incurring a loss. This action on the part of the tanners, combined with a certain degree of anxiety to sell on the part of the packers, is responsible for the present trend of things.

The country market is showing considerable more "front" than its packer contemporary. Dealers have so much confidence in early future conditions that they are averse to selling ahead in any appreciable amount. Buffs are variety brings 9¾c. New Englands are also scarce and worth 9½@9¾c. The market is closely sold up on all varieties in Philadelphia. In New York the offerings are very scarce and are commanding the high dollar. Most kinds are sold up to kill.

CHICAGO PACKER HIDES.

No. 1 NATIVES. 60 lbs. and up, 12c; **No. 1 BUTT-BRANDED.** 60 lbs. and up, 11½@11¾c; **COLORADO STEERS.** 11½c; **No. 1 TEXAS STEERS.** 12½@12½c; **No. 1 NATIVE COWS.** 10½@11c; **BRANDED COWS.** 11c; **NATIVE BULLS.** 9½c.

CHICAGO COUNTRY HIDES.

No. 1 BUFFS. 40 to 60 lbs., 9¾c; **No. 2.** 9½c; **No. 1 EXTREMES.** 25 to 40 lbs., 10c; **BRANDED STEERS AND COWS.** 9½@9½c; **HEAVY COWS.** 60 lbs. and up, 9½c; **BRANDED COWS.** 12c; **KIPS.** 10½@10½c for **No. 1 DEACONS.** 55@72½c; **SLUNKS.** 25c; **HORSE HIDES.** \$3.40@3.42; **SHEEPSKINS.** packer pelts, \$1.00@1.25; **COUNTRY PELTS.** 55@80c; **PACKER SHEARLINGS.** 38@40c; **COUNTRY SHEARLINGS.** 25@30c; **PACKER LAMBS.** 70c@\$1.00; **COUNTRY LAMBS.** 20@25c.

BOSTON.

BUFF HIDES. 9¾c; **NEW ENGLAND HIDES.** 9½@9¾c.

PHILADELPHIA.

COUNTRY STEERS. 10c; **COUNTRY COWS.** 9½@9¾c; **COUNTRY BULLS.** 9c; **GRUBBIES.** 11@11½c.

NEW YORK.

NO. 1 NATIVE STEERS. 60 lbs. and up, 12@12½c; **BUTT-BRANDED STEERS.** 11½@11¾c; **SIDE-BRANDED STEERS.** 11@11½c; **CITY COWS.** 10@10½c; **NATIVE BULLS.** 9½@9¾c; **HORSE HIDES.** \$2.00@3.25.

HIDELETS.

Max Kaufman and J. Frowenfeld sailed on the Queen Louise on the 25th inst. Both are well known in the Swamp.

E. S. Ward & Co., patent leather tanners of Newark, N. J., have purchased 10 acres of land on which they will erect another tannery.

The Lister Heirs Object.

Vice-Chancellor Stevens, of New Jersey, has been requested to grant an injunction restraining the transfer of stock of the Lister Agricultural Chemical Company to the fertilizer combination known as the American Agricultural Chemical Company. The application was made on behalf of the children and heirs of the late Edwin Lister, who founded the company, whose joint holdings represent \$300,000 or over one-half of the Lister capital stock. If the Lister heirs win, it may seriously affect the formation of the new combination.

NEW LUNDELL FAN MOTORS.

Probably there is no fan motor better known in the United States than the "Lundell," manufactured by the Sprague Electric Company, 20 Broad street, New York. These have been manufactured for eight years, and while the first models put out are yet in use

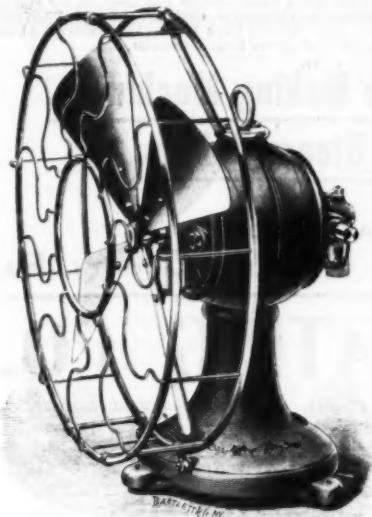


FIG. 1.—LUNDELL STANDARD FAN MOTOR.

and giving satisfactory service, there has not been a year passed in which improvements have not been made. It would be hard to imagine a more compact or symmetrical arrangement of parts than is shown in the motor.

To the single coil feature, which is broadly covered by patents, may be attributed the major share of the success which has marked the career of this comfort-disbursing motor. However, there are many other details which must enter into the successful building of a fan motor, and it is to the perfection of these various points that a great amount of attention has been directed.

One of the changes in the models for the coming season is the substitution of drop forged field shield shells instead of cast-iron. The arrangement of field magnets is very clearly shown in the sectional view in Fig. 2. The two field frames which form the incasing shell are absolutely alike, as they are forged in the same die. By reason of the high magnetic permeability of the iron it has been possible to reduce the cross-section of the projecting pole pieces at their bases. This allows the single energizing coil to assume a nearly vertical position, so that the armature may be entirely withdrawn by merely removing either one of the end brackets.

The armature shaft has been increased in diameter about 25 per cent, giving a much better bearing. The self-adjusting oil cups have also been made in such a way that the wick will feed every drop of oil in the cup.

The general increase of efficiency of the motor makes it possible to increase the pitch of the fan blades, so that the motor will deliver a larger volume of wind at a given speed without any increase in consumption of current.

The fan guard has also been improved by making it more substantial, and also by a change in the manner of attaching it to the 12-inch and 16-inch desk patterns. It will be noticed that only one brace is used. This is fixed at the top, and secured by screws and not soldered. This removes a point of considerable annoyance which occurred with previous patterns where the braces were soldered at an angle which made it a difficult matter to pack the guards without breaking them off.

The guard is secured to the bottom of the motor-frame by two small projecting lugs.

All of the various styles of desk and ceiling motors are simply, but tastefully, decorated: fans, guards and trimmings are finished in polished and lacquered brass or nickel-plate, as desired by the customer.

From advance orders, which the company has already received, running into the thousands, they feel encouraged to think that this is to be the greatest fan motor season yet experienced. An order recently booked calls for a shipment of 5000 motors to one of our newly-acquired dependencies.

Pork Packing.

Special reports show the number of hogs packed since March 1 at undermentioned places, compared with last year, as follows:

	1899.	1898.
Chicago	1,230,000	1,530,000
Kansas City	585,000	655,000
Omaha	422,000	325,000
St. Louis	323,000	295,000
Indianapolis	189,000	205,000
Milwaukee, Wis.	73,000	118,000
Cudahy, Wis.	87,000	127,000
Cincinnati	126,000	150,000
St. Joseph, Mo.	278,000	120,000
Ottumwa, Iowa	123,000	126,500
Cedar Rapids, Iowa	49,000	92,900
Sioux City, Iowa	86,000	70,000
St. Paul, Minn.	76,000	76,000
Louisville, Ky.	98,000	101,000
Cleveland, Ohio	74,000	92,000
Wichita, Kan.	24,000	40,000
Nebraska City, Neb.	50,000	74,000
Bloomington, Ill.	15,300	25,000

—Price Current.

Consolidation Completed.

The new fertilizer trust known as the American Chemical Company, has completed its organization embracing, it is said, the fol-

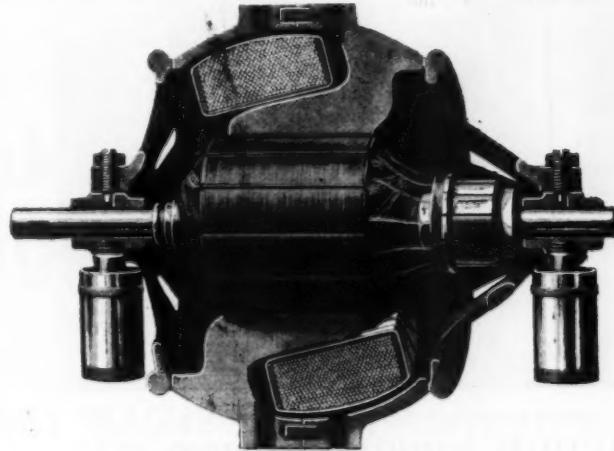
lowing companies, Brooklyn, N. Y.; The Quinnipiac Company, Boston, Mass.; Read Fertilizer Company, Brooklyn, N. Y.; Tygert-Allen Fertilizer Company, Philadelphia, Pa.; Williams & Clark Fertilizer Company, Carteret, N. J.; Zell Guano Company, Baltimore, Md.

John F. Gibbons, vice-president of the Liebig Manufacturing Company of New York City, has been selected as president, and Robert S. Bradley, president of the Bradley Fertilizer Company, of Boston, Mass., and of the Williams & Clark Fertilizer Company of New York, and William H. Grafflin, president of the Lazaretto Guano Company of Baltimore, Md., have been selected as vice-presidents of the new company.

Higher Tax on Oleo.

A dispatch from Washington says that "steps are being taken to effect an organization among members of congress from agricultural districts for the enactment of a law next winter raising the tax on oleomargarine from 2 cents a pound to 10 cents a pound. The purpose of this move is to tax oleomargarine out of existence by making its production unprofitable. The dairy interests have worked up a strong sentiment among farmers against substitute butters of all kinds and congressmen are feeling the pressure strongly."

"The production of oleomargarine, as shown by the returns at the office of the commissioner of internal revenue, aggregated 55,388,000 pounds during the fiscal year ending June 30, 1898. That was an increase of 12,854,000 pounds over the year preceding. The production for the first nine months of the current fiscal year was 63,000,000 pounds, indicating a total production for the year ending June 30 next to about 85,000,000 pounds. The dairy butter men say that the oleomargarine

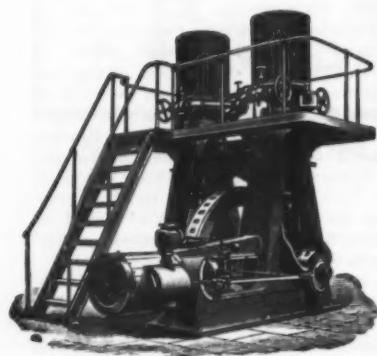
SPRAGUE ELECTRIC COMPANY.
Fig. 2.—Sectional View Through Lundell Fan Motor.

lowing plants: Alexandria Fertilizer & Chemical Company, Alexandria, Va.; H. J. Baker & Bro., Brooklyn, N. Y.; Bradley Fertilizer Company, Boston, Mass., and Los Angeles, Cal.; Chemical Company of Canton, Baltimore, Md.; The Cleveland Dryer Company, Cleveland, Ohio; Cumberland Bone Phosphate Company, Boothbay Harbor, Me.; Crocker Fertilizer Company, Buffalo, N. Y.; Detrick Fertilizer and Chemical Co., Baltimore, Md.; Jarecki Chemical Co., Sandusky, O.; Lazertto Guano Company, Baltimore, Md.; Liebig Manufacturing Company, Carteret, N. J., and Wilmington, Del.; Lister's Agricultural Chemical Works, Newark, N. J.; Maryland Fertilizing & Manufacturing Company, Baltimore, Md.; Michigan Carbon Works, Detroit, Mich.; Milson Rendering & Fertilizer Company, Buffalo, N. Y.; Northwestern Fertilizing Company, Chicago, Ill.; Preston Fertilizer Com-

pany, Brooklyn, N. Y.; The Quinnipiac Company, Boston, Mass.; Read Fertilizer Company, Brooklyn, N. Y.; Tygert-Allen Fertilizer Company, Philadelphia, Pa.; Williams & Clark Fertilizer Company, Carteret, N. J.; Zell Guano Company, Baltimore, Md.

Australian Commerce.

T. A. Coghlan, the statistician of the British government, in his recently issued annual, "Statistical Account of the Seven Colonies of Australasia," among other valuable data, states, that in six years the exports of meat products have advanced in value from £725,000 to £1,018,500. The exporting of preserved meats and the traffic in chilled and frozen meat products have also largely increased.



FRICK COMPANY ENGINEERS.

ESTABLISHED 1853.
INCORPORATED 1863.

Capital, \$1,000,000.

Manufacturers of the ECLIPSE ICE MAKING AND REFRIGERATING MACHINES. We build the largest and most successful Ice Making and Refrigerating Machinery made in this or any other country. Send for our list of References and New Ice Machine Circular for 1896, describing latest improvements and methods for Making Ice and Refrigerating. Also builders of First-class CORLISS STEAM ENGINES. Send for Corliss Engine Circular, 1896. Special High Speed (New Pattern) AUTOMATIC STEAM ENGINES. Send for High Speed Engine Circular, 1896.

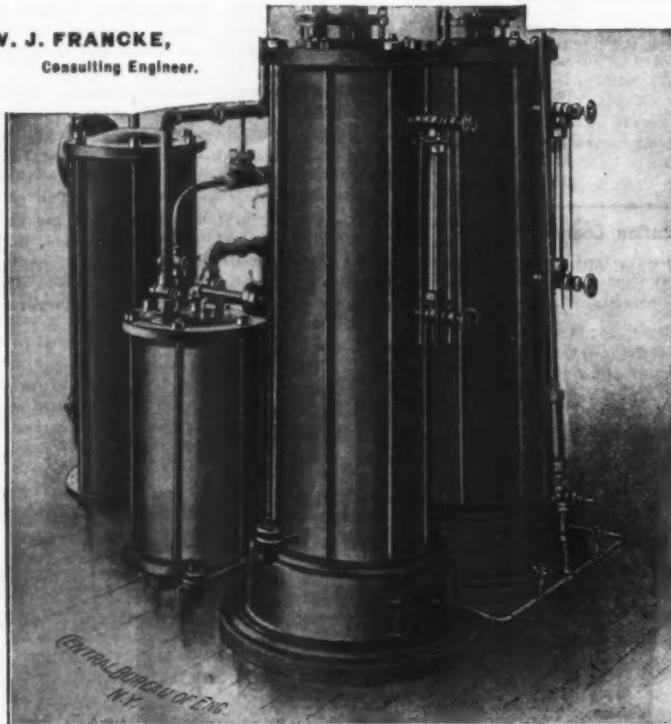
Corliss Steam Engines. Ice Making Machinery.

High Speed Engines. Steam Boilers.

Frick Company, WAYNESBORO,
FRANKLIN COUNTY, PA
ENGINEERS.

THE VACUUM REFRIGERATING CO.

W. J. FRANCKE,
Consulting Engineer.



VACUUM REFRIGERATING MACHINE.—Front View.

THE VACUUM REFRIGERATING CO. - New Brunswick, N. J., U. S. A.

**CONTRACTORS,
ENGINEERS,
FOUNDERS.**

**BUILDERS OF....
REFRIGERATING AND ICE
MAKING MACHINERY.**

We contract for the Equipment of
Complete Plants.

The Vacuum Refrigerating Apparatus is a Wonder. It is Intended for Attachment to Ice Boxes Consuming from 250 lbs. to 1,000 lbs. of Ice per Day. We claim for this Apparatus a Continuous Automatic Circulation of the Refrigerating Agent. Unlike All Others it Requires NO PUMP, NO ENGINE, NO MECHANIC, NO BRINE, no Re-charging with Chemicals, and can be Installed Without Interruption to any Business. The Cost of Refrigeration is Greatly Reduced. Every Vacuum Refrigerating Apparatus is Guaranteed to do all We Claim for it in every Particular. A Detailed Description of the Operation of the Vacuum System of Refrigeration will be sent on Application.

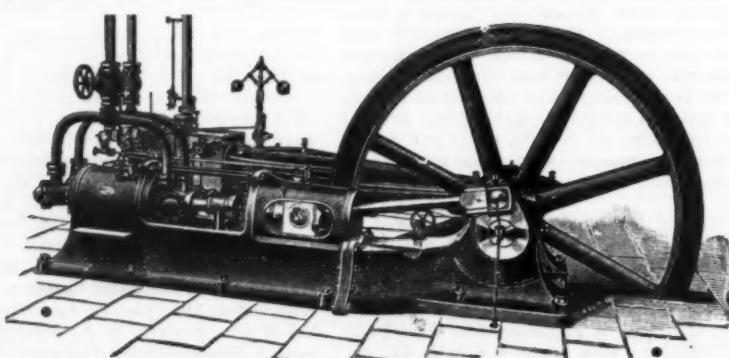
The VILTER MFG. CO.

806-826 CLINTON STREET,
MILWAUKEE, WIS.

BUILDERS OF IMPROVED COMPRESSION

Refrigerating ... Machinery

FOR PACKING HOUSES, ABATTOIRS, MARKETS,
COLD STORAGE HOUSES, BREWERIES, HOTELS,
AMMONIA FACTORIES AND ICE PLANTS.



IMPROVED CORLISS ENGINES.

Ice and Refrigeration

The ice manufacturing plant and cold storage of F. A. Elsner at Clinton, Mo., was burned. The plant was valued at \$60,000. Insurance and salvage will amount to about \$17,000.

The Western Cold Storage Company, of Chicago, has received a permit to erect a four-story brick storage warehouse at the foot of South Water street, Chicago. It will cost at least \$14,000.

The Lynchburg Ice and Refrigerator Company's factory at Lynchburg, Va., has been destroyed by fire. The factory and equipment cost about \$25,000. There was some insurance.

The Columbia Brewing & Ice Manufacturing Company of Baltimore, Md., has been incorporated with a capital of \$150,000. The company will manufacture ice and brew beer, etc. It may also furnish steam power.

The Twin City Ice and Cold Storage Company, of Champaign, Ill., has certified to an increase of its capital from \$30,000 to \$75,000. It is reported that the company contemplates enlargements and improvements.

Frank A. Souter, the contractor, has the contract for making extensive improvements in the Central Market, Maryland and Atlantic avenues, Atlantic City, New Jersey. These improvements will greatly enlarge the capacity of the market.

The Jersey Cow Creamery Company, of Hanover, Mich., has been incorporated with

a capital of \$25,000. The corporators are: G. M. Edison, J. Wheeler, F. A. Hall, H. J. Felker, Grand Rapids; and R. D. Graham, of Walker, Kent County, Mich.

The Knoxville (Tenn.) Ice Company has recently placed an electric light plant in their building on West Cumberland street. The work was done by the Biddle Manufacturing Company. The company is producing ice for both the city and shipping trade.

Dennis Kelly and others, stockholders of the Capital Ice & Cold Storage Company, of Columbus, Ohio, have begun suit to enjoin the sale of the plant or its product to any trust. It is said that \$550,000 has been offered by the ice trust for the four principal ice plants in that city.

The Crockery City Brewing Company, of East Liverpool, Ohio, has been incorporated with a capital of \$200,000. The corporators are: George W. Meredith, Joseph Turnbull, Philip Moreley, John J. O'Riley, John M. Pfeiffer, and C. H. Ridall, all of East Liverpool. The company has the right to increase its capital to \$500,000.

The Hawaiian clipper bark Roderick Dhu, a regular trader between San Francisco and Hilo, H. I., is being fitted with a cold storage plant and when completed, she will be the first sailing vessel ever equipped with refrigeration. The vessel will carry fresh beef, mutton, poultry, etc. On the return trip the Roderick Dhu will bring tropical fruits, and it is expected that vegetables will be carried in the off months, so that string beans, asparagus, etc., will be plentiful in California about Christmas time.

THE YORK MANUFACTURING CO.'S CONTRACTS.

The York Manufacturing Company, of York, Pa., have recently closed contracts with the following parties:

J. M. Denholm & Sons, Pittsburg, 25-ton refrigerating and 10-ton ice plant to be erected at East Liberty, Pa.; Parties from Anderson, Ind., 20-ton plant in Piqua, Ohio; plant will be on the car system. Louis Niebergall, butcher and packer, Wheeling W. Va., 20-ton refrigerating plant.

The Sutphin Ice & Coal Company, Trenton, N. J., who last year erected a 10-ton ice-making plant in that city, have found it necessary to increase their capacity. The additional machinery necessary to increase the plant to 25 tons daily capacity is now being installed by the York Manufacturing Company, who also furnished the machinery for the original plant. Messrs. McCarty & Tougher have formed a co-partnership in Washington, Ind., for the manufacture of artificial ice, and have given the contract to the York Company for one of their latest improved 20-ton ice-making plants. Tasker & Julie have secured control of the Fidelity Storage Company's building in Philadelphia and will fit it up as a modern storage warehouse. The contract with the York Manufacturing Company for the refrigerating machinery for the new plant calls for two 125-ton tandem compound condensing refrigerating machines and all necessary apparatus for a complete and modern refrigerating plant.

A CORRECTION.

In our issue of last week, May 20, in our article on the subject of "The Ice and Refrigerating Problem for Small Consumers," the weight of the Lewis machine of the smallest capacity was made to read, by a typographical error, 50 lbs. This should have read 500 lbs., which is the true gross weight of the machine crated and ready for shipment. This machine is manufactured by the Lewis Manufacturing Company, of 134 Liberty street, New York.



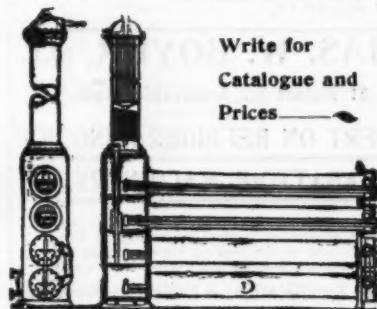
THE BEST Ice-Making and Refrigerating

*It is the Simplest,
Most Economical,
Most Durable of them All.*

MACHINE
BUILT.

HENRY VOGT MACHINE CO., LOUISVILLE, KY.

Write for
Catalogue and
Prices



GENERATOR—Pat. Jan. 24, 1888, and Sept. 23, 1890.

REASONS WHY P & B INSULATING PAPERS

They are the most durable in the market.
They are thoroughly air tight, moisture proof and odorless.
They contain no tar and have no odor.

The P & B Papers for insulating purposes in cold storage and packinghouses, are more extensively used than any other papers made, entirely on account of their merit.

P & B PAINTS A PERFECT COATING FOR PIPES, COILS,
CONDENSERS, VATS, ETC.

The P & B PAPERS and the P & B PAINTS are entirely acid and alkali proof.
They are also unaffected by extremes in temperature.



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Manufacturers of P & B Products.
81 & 83 John St., N. Y.
Chicago Office, 189 Fifth Ave.

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full particulars.

JOHN D. CRIMMINS, Jr.,
PRESIDENT.

MANUFACTURERS OF

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Atlantic Alcatraz Roof Paint,
Atlantic Alcatraz Felts.

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ASPHALT FLOORS,
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OFFICE, 57 East 59th Street, N. Y.



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Wheeler & Thomas, 160-171 Wells St., Chicago, Ill.
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Winding & Gezelschap, 609 Pabst Bldg., Milwaukee, Wis.
T. J. Lewis Roofing Co., Omaha, Neb.
F. W. Heerwagen, 508 Prudential Bldg., Buffalo, N. Y.

ARCTIC FREEZING CO., Cold Storage & Freezing

119, 120 & 121 WEST ST.,

Telephone 1033 CORTLANDT. NEW YORK.
ROTHMANN & ROBINSON, Proprietors.

JOHN R. ROWAND,
MANUFACTURER OF
CHARCOAL

Re-Carbonized, Pulverized and Granulated
For Chemical, Rectifying and Foundry Purposes;
also for Ice Manufacturers a specialty.

ENTERPRISE MILLS, CLEMENTON, Camden Co., N. J.
REFERENCES: U. S. Mint, Rosengarten & Sons,
Smart, Peterson & Co., Philadelphia; Warehousing
and Cold Storage Co., Philadelphia.

Philadelphia, Pa., March 3, 1898.
Mr. John R. Rowand.
Dear Sir: We have been using your Re-carbonized
and Granulated Charcoal for a long time, and
cheerfully add my testimony as to its quality
and cleanliness, effectiveness as a filtering.
Yours truly, JOHN W. EDMUNDSON,
Chief Engineer Philadelphia Warehousing and
Cold Storage Co.

CHAS. W. BOYER, M.E.

81 Walnut St., Somerville, Mass.

EXPERT ON REFRIGERATING, ICE AND ABATTOIR MACHINERY....

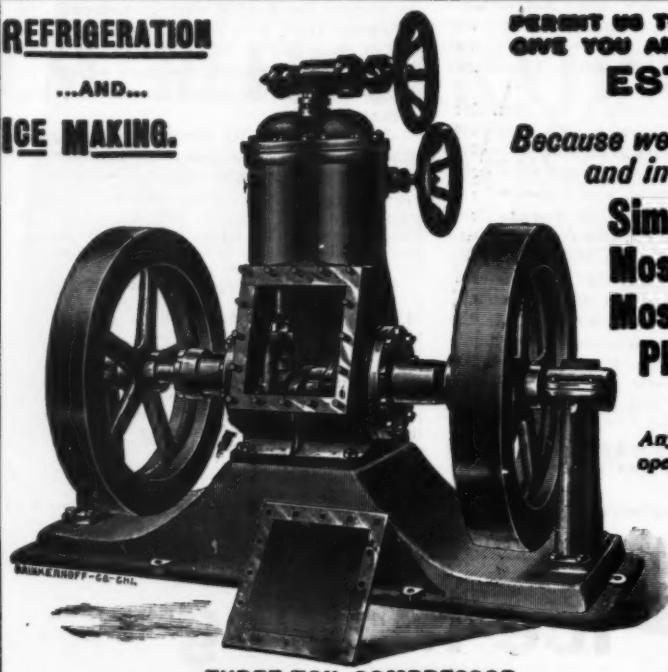
Inspections and tests made to determine the
most economical method of running a Re-
frigerating or Ice Making Plant. Errors of
Construction Located and Corrected.

Designs, Specifications & Estimates Prepared.
Expert supervision given for purchasers having
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...AND...

ICE MAKING.



THREE-TON COMPRESSOR.

PERMIT US TO
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ESTIMATE.

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**Simplest,
Most Durable,
Most Efficient
Plants.**

Anyone competent to
operate motive power
can operate them.

ONE TON TO
TWENTY-
FIVE TONS.

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35 Osceola Street OSHKOSH, WIS.

ISBELL-PORTER COMPANY, Engineers and Founders.

New York Office, 245 Broadway, New York City.

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BUILDERS OF THE **POLAR** Absorption Refrigerating and Ice Making Machine

For direct expansion or brine circulation.

Machines in operation in capacities up
to 150 tons per day each.

POLAR BRINE COOLERS For
POLAR CONDENSERS Compression
Plants.

Estimates, drawings and specifications fur-
nished for complete plants or for alterations
and improvements, and for the equipment of
direct expansion plants with brine coolers.

WANT AND FOR SALE ADS. can be found on PAGE 42.

New York Markets.

OCEAN FREIGHTS.

	Liverpool	Glasgow	Hamburg	
	per ton.	per ton.	per ton.	per 100 lbs.
Oil cake	7/6	8/	80.15	
Bacon	10/	15/	75 PT.	
Lard, tcs.	10/	15/	75 PT.	
Cheese	20/	25/	2 M.	
Butter	25/	30/	2 M.	
Tallow	8/9	13 9	75 PT.	
Beef, per fc.	2/	3/	75 PT.	
Beef, per bbl.	1/6	2/6	3.00 M.	

Direct port U. K. or continent, large steamers, berth terms, 2/6. Cork for orders, 3/4.

LIVE CATTLE.

Weekly receipts:

	Beefs.	Cows.	Calves.	Sheep.	Hogs.
Jersey City	3,278	2	3,371	16,725	9,540
Sixth St.	2,736	184	10,451	10,393	38
Fortieth St.					20,442
Hoboken	2,353	42	42	1,824	
Lehigh Val. R. R.	2,332				3,298
Scatterson	465		189	1,190	
Totals	10,164	228	12,623	29,132	33,318
Totals last week	11,074	182	12,628	28,891	28,300

Weekly exports:

	Live Cattle	Live Beef	Quart.
Eastmans Company			
Swift and Company			
Nelson Morris			
Schwarzchild & Sulzberger	300		
Armour & Co.			
J. Shamborg & Son	300	1,071	
W. W. Brauer Co., Ltd.	400		
Lummess & Halligan	180		
T. Halligan	18		
W. Levock	54		
W. A. Sherman	200		
A. McIntosh	165		
L. S. Dillenback	35		
A. E. Outerbridge	26		
Total shipments	1,643	1,106	14,554
Total shipments last week	3,321	1,102	20,486
Boston exports this week	2,618	1,000	15,582
Baltimore	"	727	1,437
Philadelphia	"	274	1,320
Newport News	"	700	
Montreal	4,423	694	
To London	1,981	45	3,717
To Liverpool	6,034	2,071	27,041
To Glasgow	1,349	649	
To Hull	200		
To Newcastle	461		
To Bristol	359		
To Southampton			2,092
To Bermuda and West Indies	26	35	
Totals to all ports	19,185	4,494	51,146
Total to all ports last week	9,638	2,469	32,774

QUOTATIONS FOR BEEVES New York.

Good to prime native steers	5 20 & 5 50
Medium to fair native steers	4 75 & 5 15
Common native steers	4 25 & 4 45
Stags and Oxen	2 50 & 4 80
Bulls and dry cows	2 40 & 4 35
Good to prime native steers one year ago	4 90 & 5 10

LIVE CALVES.

The receipts of calves were fairly large and prices were steady, with a fair demand. We quote:

Live veal calves prime, per lb.	a 7/
" " common to good, per lb.	6/ a 7

LIVE HOGS.

With fair receipts and a slow demand, the market ruled easier this week. We quote:

Hogs, heavy weights (per 100 lb.) extreme	4 25 a 4 30
Hogs, heavy	4 25 a 4 30
Hogs, light to medium	4 20 a 4 30
Pigs	4 20 a 4 30
Roughs	a 3 30

CHICAGO.

Union Stockyards.—Hog market slow, 5@10c. decline; light hogs, \$3.60@3.82 1/2; mixed packers, \$3.60@3.90; heavy shipping grades, \$3.50@3.95; rough packing grades, \$3.50@3.65. Hogs closed weak; packers bought 35,500; shippers, 7,500; left over, 8,000.

CINCINNATI.

Hog market lower, \$3.20@3.90.

EAST BUFFALO.

Hogs—20 cars on sale; easy to 5c. lower; pigs, \$3.90@3.95; Yorkers, \$4.00; mixed, me-

diums and heavy, \$4.00@4.05; roughs, \$3.30@3.40; stags, \$2.50@3.00; slow, draggy. Closing steady; pigs, \$3.90; 2 cars unsold; Yorkers, \$3.97@4.00; 1 car unsold; mixed, mediums and heavy, \$4.00@4.05, all sold.

EAST LIBERTY.

Hogs fairly active; best medium weights, \$4.05; best heavy weights, \$4.00; best heavy Yorkers, \$4.00; common and fair Yorkers, \$3.90@3.95; pigs, \$3.80@3.90.

INDIANAPOLIS.

Hogs weak, \$3.70@3.85.

PEORIA.

Hog market 5@10c. lower; light, \$3.55@3.72 1/2; mixed, \$3.60@3.77 1/2; heavy, \$3.65@3.80; rough, \$3.25@3.40.

ST. LOUIS.

Hogs 5c. lower; Yorkers, \$3.70@3.80; packers, \$3.75@3.80; butchers', \$3.80@3.90.

LIVE SHEEP AND LAMBS.

Prices remain about the same as last week, with fair receipts and a slow demand. We quote:

Spring Lambs	7/8 a 8/4
Live wool lambs, choice, per lb.	7/8 a 7/4
" " wool " medium, per lb.	6/8 a 7
" " " " " clipped	6/8 a 6/8
Live sheep	4 a 5
" common to medium	4 a 5

LIVE POULTRY.

Demand for fowls is rather slow; spring chickens in light supply and selling well, especially when large. Old roosters steady. Turkeys command about former prices. Ducks and geese have to show very attractive quality to realize full quotations. Pigeons quite plenty and barely steady. We quote:

Spring Chickens, large, per lb.	25 a 27
" small	21 a 23
Fowls	13 1/2
" young	9 a 11 1/2
Turkeys, mixed, per lb.	9 1/2 a 10 1/2
Ducks, Western, per pair	65 a 85
" Southern, "	60 a 80
" Southwestern, per pair	60 a 70
Geese, Western, per pair	1 10 a 1 35
" Southern, "	85 a 105
" Southwestern, per pair	85 a 110
Pigeons, per pair	30 a 35

DRESSED BEEF.

The demand for beef was fairly good during the week, and prices ruled steady. We quote:

Choice Native, heavy	8 a 8 1/2
" light	8 a 8 1/2
Common to fair Native	7 1/2 a 8
Choice Western, heavy	7 1/2 a 8
" light	7 1/2 a 8
Common to fair Texan	7 1/2 a 7 1/2
Good to choice Heifers	7 1/2 a 7 1/2
Common to fair Heifers	7 1/2 a 7 1/2
Choice Cows	6 1/2 a 7
Common to fair Cows	6 1/2 a 6 1/2
Good to choice Oxen and Stags	6 1/2 a 6 1/2
Common to fair Oxen and Stags	6 1/2 a 6 1/2
Fleshy Bologna Bulls	6 a 6 1/2

DRESSED CALVES.

The demand was fairly good for vealers during the week, at steady prices. We quote:

Veals, City dressed, prime	11 a 12
" common to good	10 a 11
" Country dressed, prime	9 1/2 a 10
" fair to good	9 a 9
" common to fair	8 a 7 1/2

DRESSED HOGS.

There was no change in the market this week. Demand being slow and prices steady. We quote:

Hogs, heavy	a 6 1/2
Hogs, 180 lbs.	a 5 1/2
Hogs, 160 lbs.	a 5 1/2
Hogs, 140 lbs.	a 5 1/2
Pigs	a 5 1/2

DRESSED SHEEP AND LAMBS.

Trade was very quiet this week and prices remain unchanged. We quote:

Spring Lambs	12 1/2 a 15
Good to choice lambs	11 a 12
Common to medium lambs	10 a 11
Good to prime sheep	9 a 10
Common to medium	8 1/2 a 9

DRESSED POULTRY.

Receipts last six days, 2,385 packages, previous six days, 3,337 packages. With continued moderate receipts of iced fowls and comparatively light invoices of stock to come the market continues in a very strong position. Prices have reached a point that materially curtails the demand and can only be sustained by continued moderate receipts. Old roosters scarce and firm. Broilers of desirable size and quality from any section are in demand and firm. Eastern and L. I. spring ducks less active, but held firmly. Squabs more plenty and lower. Frozen turkeys and broilers steady, but frozen roasting chickens in fair demand and firm. We quote:

FRESH KILLED—ICED.	
Turkeys, average grades, per lb.	a 11 1/2
Broilers, Phila., per lb.	31 a 38
" L. I., scalded	29 a 31
" Western, dry-picked	24 a 31
" scalded	24 a 28
Fowls, State and Penna., good to prime	13 a 13 1/2
" Western, dry-picked, prime	13 a 13 1/2
" scalded, prime	13 a 13 1/2
" Western, heavy	12 a 12 1/2
Old cocks, Western, per lb.	a 9
Ducks, L. I., Spring	20 1/2 a 21 1/2
" Eastern, Spring	21 1/2 a 22 1/2
Squabs, choice, large white, per doz.	a 2 7/8
" small and dark, per doz.	1 50 a 1 7/8

FROZEN.

Turkeys, No. 1	13 1/2 a 14 1/2
No. 2	10 1/2 a 11 1/2
Broilers, No. 1, dry-picked	19 a 21
" 1, scalded	17 a 19
Chickens, soft-meated	15 a 16
" No. 1	13 a 14
" No. 2	10 a 11

PROVISIONS.

There was a fair demand for provisions during the week, with prices ruling about steady. We quote:

(JOBING TRADE).	
Smoked hams, 10 lbs. average	9 a 9 1/2
" 12 to 14 "	9 a 9 1/2
" heavy	8 1/2 a 8 1/2
California hams, smoked, light	6 1/2 a 6 1/2
" " " heavy	6 1/2 a 6 1/2
Smoked bacon, boneless	8 1/2 a 9
" (rib in)	8 a 8 1/2
Dried beef sets	14 a 15
Smoked beef tongues, per lb.	5 1/2 a 6
Pickled bellies, light	5 1/2 a 6
" heavy	5 1/2 a 6
Fresh pork loins, City	8 a 8 1/2
" " " Western	7 a 7 1/2
Pickled ox tongues, per bbl.	26 00

LARDS.

Pure refined lards for Europe	5 60 a 5 45

</tbl

D. B. MARTIN,

**Union Abattoir Company,
OF BALTIMORE.**

**Grays Ferry Abattoir Co.,
OF PHILADELPHIA.**

Abattoir Hides, All Selections.

Manufacturers Oleo Oil, Stearine, Neutral Lard, Refined
.....of Tallow, Neats Foot Oil, Pure Ground Bone,
Glues, and all Packing House Products.

Address all Communications to D. B. MARTIN'S MAIN OFFICE,

903 and 904 Land Title Building, = = Philadelphia, Pa.

UNION TERMINAL COLD STORAGE CO.
BALTIMORE, MD.

DIRECT TRACK CONNECTIONS WITH THE
Pennsylvania Railroad Co.,
and its Affiliated Lines.

D. B. MARTIN, President.

F. W. ENGLISH, Superintendent.

GAME.

The season for game being over, quotations for the time being are suspended.

BUTTER.

Receipts last six days, \$48,921 packages; previous six days, \$39,604 packages. Trade was not very active, but the buying element became convinced that the market was on bottom for the present, and jobbers who needed goods did not hesitate to buy. There was a little speculative trading which, with the stock that is being put in storage on owners' account relieved the market considerably. Much of the butter is of higher average quality than heretofore, but there is still considerable stock that shows the character of fodder make and receivers are urging sales of such. State dairy remains quiet, the quality is very irregular and buyers are not disposed to take it, except at low figures. Imitation creamery steady. We quote:

Creamery, Western, extras, per lb.	a 18 1/2
" " firsts	a 17 1/2
" " seconds	a 16 1/2
" " thirds	a 15 1/2
" State, extras	a 18 1/2
" " firsts	a 17 1/2
" " thirds to seconds	a 15 1/2
State dairy, half firkin tubs, fancy	a 17 1/2
" " firsts	a 17 1/2
" Welsh tubs, fancy	a 17 1/2
" " firsts	a 16 1/2
" tubs, seconds	a 16 1/2
" tubs, thirds	a 14 1/2
Western, imitation creamery	a 15 1/2
" " firsts	a 14 1/2
" " seconds	a 13 1/2
" factory, fresh firsts	a 13 1/2
" lower grades	a 12 1/2

CHEESE.

Receipts last six days, 20,408 boxes; previous six days, 18,445 boxes. Supplies of large full cream cheese continue moderate, and, while general trading is by no means snappy, still there is some call from exporters and market appears to be about steady. Small full cream selling fairly to the home trade and fancy grades held about steady. Choice skins in fair request, but ordinary grades slow and irregular. We quote:

NEW CHEESE.	
State, full cream, large white, choice	a 10
" " large colored, choice	a 9
" " large, white, good to prime	9 1/2 a 9 1/2
" " small, colored, choice	9 1/2 a 10
" " white, choice	a 10
" " good to prime	9 1/2 a 9 1/2
" " common to fair	8 1/2 a 9
" light skins, small, choice	5 1/2 a 8
" large	7 1/2 a 8
" part skins, small choice	7 1/2 a 7 1/2
" large choice	7 1/2 a 7 1/2
" good to prime	6 1/2 a 7
" common to fair	5 1/2 a 6 1/2
" full skins	3 1/2 a 4 1/2

EGGS.

Receipts last six days, 78,173 cases; previous six, 85,008 cases. Arrivals are considerably lighter than last week. A good deal of stock is still going into cold storage and the goods offering on the open market are of irregular quality, a considerable proportion being unsatisfactory to best trade. With the storage movement taking a good many of the finest eggs, dealers looking for superlative qualities are obliged to bid strong prices. Ordinary and low grade regular packings from all points are still dragging and urgently offered at previous quotations. We quote:

QUOTATIONS—LOSS OFF.

State, Penn. and near by, av. best, per doz.	16 a 16 1/2
Mich., North. O. and N. Ind., firsts	16 a 16 1/2
Other Western, firsts, North. secs., reg. pkd.	16
" Southerly	a 15 1/2

QUOTATIONS AT MARK.

Storage packings, West, northerly sections	15 1/2 a 16
Western, reg. packing, low grade, 30-doz. case	3 95 a 4 10
Kentucky, average prime, 30-doz. case	3 95 a 4 10
" poor to fair	3 50 a 3 80
Tennessee, prime, per 30-doz. case	3 80
Southern, poor to fair	3 50 a 3 65
Dixie, prime, per 30-doz. case	3 65 a 3 80
" common to good, 30-doz. case	3 90 a 3 80
Checks, prime, per 30-doz. case	3 05 a 3 35
" poor to good, 30-doz. case	2 60 a 2 90

BUTCHERS' SUNDRIES.

Fresh Beef Tongue	50 to 60c a piece
Calves' heads, scalded	35 to 45c a piece
Sweet breads, vials	40 to 75c a pair
" Beef	15 a 25c a pair
Calves' livers	40 to 60c a piece
Beef kidneys	8 to 10c a piece
Mutton kidneys	3c a piece
Livers, beef	10 to 60c a piece
Oxtails	8 to 10c a piece
Hearts, beef	15 to 20c a piece
Hocks, beef	15 to 20c a piece
Butts, beef	12c a lb
Tenderloins, beef	22 to 30c a lb
Lamb's fries	8 to 10c a pair

BONES, HOOFs, HAIR AND HORNS.

Round shin bones, av. 40-55 lbs. per 100 bones, per 2,000 lbs.	\$55 00
Flat shin bones, av. 42 lbs. per 100 bones, per 2,000 lbs.	40 00
Thigh bones, av. 30-45 lbs. per 100 bones, per 2,000 lbs.	85 00
Hoofs	20 00
Horns, 7 1/2 oz. and over, steers, 1st quality	\$150 00-190 00
" 7 1/2 oz. and und."	100 00-150 00
" No. 3	50 00-90 00
Gluestock, dry, per 100 lbs.	3 00-5 00
" Wet	1 50-3 00
Cattle switches, per pc.	3-5c.

BUTCHERS' FAT.

Ordinary shop fat	a 2
Sust, fresh and heavy	a 4
Shop bones, per cwt.	30 a 50

SHEEPSKINS.

Sheep and Lambkins	1 25 a 1 50
Modoc	1 a 20
Shearlings	30 a 35

GREEN CALFSKINS.

No. 1 Skins	17
No. 2 Skins	15
No. 1 Buttermilk Skins	13
No. 2 Buttermilk Skins	11
Heavy No. 1 Kips, 12 lbs. and over	2.25
Heavy No. 2 Kips, 17 lbs. and over	2.00
Light No. 1 Kips, 14 to 18 lbs.	1.90
Light No. 2 Kips, 14 to 18 lbs.	1.65
Branded Kips, heavy	1.85
Light Branded Kips	1.00
Kips, Ticks, heavy	1.75
" " light	1.25
Branded G. S.	75
Bobs or deacons	30

SAUSAGE CASINGS.

Sheep, imported, wide, per bundle	70
" " per kg. 50 bales	\$35 00
" " medium, per bale	50
" " narrow	30
" " domestic, "	40
Hog, American, per lb.	20
" " bbis, per lb.	20
" " 1/2 bbis, per lb.	22
" " kegs, per lb.	22
Beef guts, rounds, per set (100 feet), f.o.b. N. Y.	18
" " per lb.	2 a 3
" bungs, piece, f.o.b. N. Y.	a 7 1/2
" " per lb.	a 7
" " middles, per set (57/80 ft.), f.o.b. N. Y.	4 a 5
" " " " Ohio	45
" " per lb.	a 8
" weasands, per 1,000, No. 1's.	2 a 3
" " No. 2's	12 a 20
Russian rings	

SPICES.

Pepper, Sing. Black	11 1/2 12
" White	18 1/2 19
" Penang, White	10 1/2 17 1/2
" Red Zanzibar	15 18
" Shot	12
Allspice	9 11
Coriander	3 5
Cloves	10 14
Mace	45 50
Nutmegs, Illos	34 40
Ginger, Jamaica	18 20
" African	6 10
Sage Leaf	7 9
" Rubbed	10
Marjoram	25 28

SALTPETRE.

Crude	3 80 a 3 85
Refined—Granulated	4 a 4 1/2
Crystals	4 1/2 a 5
Powdered	4 1/2 a 5

THE GLUE MARKET.

A Extra	22c
1 Extra	18c
1	16c
1X moulding	15c
1X	15c
1 1/2	14 1/2
1 1/2	14c
1 1/2	13c
1 1/2	11c
1 1/2	10c
1 1/2	9c
2	8c

CHEMICALS AND SOAP-MAKERS' SUPPLIES.

14 percent. Caustic Soda	1.55 to 1.65 per 280 lbs.
75 " Caustic Soda	1.70 to 1.75 per 60 lbs.
60 " Caustic Soda	1.70 per 100 lbs.
98 " Powdered Caustic Soda, 2 1/2-3 cts. lb.	
58 " Pure Alkali	85-90 cts. for 48 p.c.
48 " Soda Ash	85c-95c per 100 lbs.
Crystal Carbonate Soda	1.45-1.50 per 100 lbs.
Caustic Potash	45 to 5 cts. lb.
Borax	1/2 cts. lb.
Talc	1 to 1 1/2 cts. lb.
Palm Oil	5 1/2-6 1/2 cts. lb.
Green Olive Oil	54 to 56 cts. gallon.
Yellow Olive Oil	58 to 60 cts. gallon.
Cochine Cocoonut Oil	7 to 7 1/2 cts. lb.
Ceylon Cocoonut Oil	8 to 8 1/2 cts. lb.

CUBAN COCONUT OIL.

Cottonseed Oil 26-40 cts. gallon.
Rosin \$2.00 to \$3.00 per 280 lb.

THE FERTILIZER MARKET.

The market was quiet during the week owing to the fact that there is practically no sport or prompt goods to be had at present and packers are holding very firm on their prices. We quote:

Bone meal, steamed, per ton	\$20 50 a 21 1/2
" raw, per ton	23 00 a 24 00
Nitrate of soda, spot	a 1 57 1/2
" to arrive	1 55 a 1 62 1/2
Bone black, spent, per ton	12 00 a 13 00
Dried blood, New York, 13-18 per cent.	
ammonia	1 77 1/2 a 1 82 1/2
Dried blood, West, high gr. fine ground	2 04 a 2 05
Tankage, 9 and 20 p. c., f.o.b. Chicago	15 25 a 16 75
" 8 and 20 "	13 75 a 14 50
" 7 and 30 "	13 00 a 13 50
" 6 and 35 "	12 00 a 12 50
Garbage Tankage, f.o.b. New York	7 50 a 8 00
Asotino, per unit, del. New York	1 82 1/2 a 1 88
Fish scrap, wet (at factory), f. o. b.	10 00 a 10 25
Sulphate ammonia, gas, for shipment, per 100 lbs.	a 3 17 1/2
Sulphate ammonia, gas, per 100 lbs., spot	a 3 15 a 2 85
South Carolina phosphate rock, ground, per 2,000 lbs., f. o. b. Charleston	6 00 a 6 50
South Carolina phosphate rock, undried, f. o. b. Ashley River, per 2,400 lbs.	3 40 a 3 50
The same, dried	4 20 a 4 25
POTASHERS, ACCORDING TO QUANTITY.	
Kainit, future shipment, per 2,240 lbs.	8 70 a 8 95
Kainit ex store, in bulk	9 60 a 10 65
Kieserit, future shipment	7 00 a 7 25
Muriate potash, 80 per cent., fut. shp't	1 78 a 1 85
Muriate potash, 80 c. ex store	1 83 a 1 90
Double manure salt (48 49 per cent. less than 20 per cent. chlorides), to arrive, per lb.	1 01 a 1 13
per cent.	1 06 a 1 20
Sulphate potash, to arrive (basis 90 per cent.)	1 99 1/2 a 2 08 1/2
Ylvinit, 24-36 per cent., per unit S. P.	36 1/2 a 37 1/2

BALTIMORE FERTILIZER MARKET.

The market for ammoniates remains unchanged. We quote:

Crushed tankage, 7 and 25, \$13.50 per ton f.o.b. Chicago; crushed tankage, 10 and 12, \$16.50@17.00 per ton f.o.b. Chicago; crushed tankage, 9 1/2 and 15, \$16.00@16.50 per ton f.o.b. Chicago; crushed tankage, 9 and 20, \$15.50 per ton f.o.b. Chicago; concentrated tankage, \$1.50@1.52 1/2 per unit f.o.b. Chicago; hoofmeal, \$1.50 per unit f.o.b. Chicago; ground blood, \$1.80@1.85 per unit f.o.b. Chicago; crushed tankage, \$1.85@1.87 1/2 and 10 c. a. f. Baltimore.

Sulphate of ammonia, foreign, has sustained a considerable advance, and shipments for summer and fall are quoted at \$3.20 to \$3.25 c. a. f. New York and Baltimore.

REFRIGERATING AND ICE MAKING.

By A. J. WALLIS-TAYLOR. \$3.00

THERMODYNAMICS, HEAT MOTORS AND REFRIGERATING MACHINERY.

By DE VOLSON WOOD. \$5.00.

PRACTICAL ICE MAKING AND REFRIGERATING.

By EUGENE T. SKINKLE. Cloth, \$1.50.

PRACTICAL RUNNING OF AN ICE AND REFRIGERATING PLANT.

By PAUL G. O. STEPHANSKI. \$2.00.</p

Retail Department.

THE STATE CONVENTION AND DUTY.

About a week from now the State convention of the Retail Butchers' Association of New York will be held at Utica. The associations are electing delegates to represent them on that occasion. The indications are that the personnel of this one will be made up mostly from those delegates who have attended one or more of the State conventions of the last three years. We are free to confess that the last twelve months showed much disappointment for the retail trade in that contemplated reforms and sought for relief did not materialize. Butchers and marketmen generally will learn in time that a platform first decided upon, and then submitted to candidates for municipal and legislative honors before those candidates are voted for will secure better, and more ready support than posthumous bills submitted to representatives who have first been elected to office. The death of the anti-stamp bill, at Albany, was an example. The retail trade generally could exert a strong influence upon law-making minds if united action were taken before elections. We hope that the delegates who will go to Utica on June 5 and 6 next, will bear this fact in their minds and think from now until then upon the measures of relief desired by marketmen and the necessary steps to be taken to carry these into effect. Having digested measures and plans, the details for united action can be formulated at the next election, when candidates are up again for the suffrages of the trade.

Only the anti-stamp act was seriously before the last Legislature at Albany.

The bill, according to the resolution of the Rochester convention calling for an act to make the wife also responsible for the husband's food debts was not, so far as we know, even drafted. Such a bill we believe had even a better chance of passage than the trading stamp bill. It rested on better ground and was really more needed. As the governor has called a next session of the Legislature this bill could be drafted and pushed through. The temper of the present members can be felt on it and the associations will know the objections to such legislative relief as well as the individual feeling of the present representatives so as to know who to trust and to vote for at the polls the next time. A preliminary skirmish at Albany, even if it brings no immediate statutory relief will put the marketmen and their friends in fighting trim. The forthcoming State convention may have time to act upon all of this, first.

** The Board of Health meat inspectors for the week ending May 24 condemned the following quantities of meats: Beef, 2,375 lb; 2 calves, 80 lb; veal, 1,700 lb; mutton, 100 lb; hogs, 2,390 lb; 17 barrels poultry, 3,400 lb; 2 barrels meat, 400 lb; 1 barrel game, 200 lb.

OUSTED LIVERY COWS.

The metropolitan Cubans kept their milk cows in stables in the cities. They were fed and milked there, and have been so for ages. Their impure milk has materially added to the ravages of disease about Havana and other cities. Milk produced under such foul and filthy surroundings could not, by any manner of reasoning, be healthy or give health wherever it was consumed. Gen. Ludlow, the governor of the city, easily discovered this impure food and at once gave orders that these stable cows should be released from the contaminating prisons and be allowed to roam on the green hills and in the grassy fields that they might give a purer article of diet for the enfeebled constitutions of the natives, whose food is largely influenced by milk and vegetables, with a bit meat and other edibles thrown in when they can be had for the price.

ADD THE COST.

There are butchers who pride themselves upon the fact that no matter how the wholesale and the live stock markets go up and down their retail prices never change. Constancy is a virtue, but it is the virtue of sentiment. The laws of supply and demand, of profit and loss are inexorable rules of business which have no regard for sentiment. The retail butcher can no more afford to sell meat at his old price when it cost him more than 8 cents per pound, for the meat alone in the carcass than the slaughterer can afford to sell for 7 cents per pound that which cost him more. The proper per cent. of profit must be added to the whole cost—including all expenses—before the retailer can sell at a profit. The great trouble with the shop boss now is that he will not put up the retail price of his meat in proportion to the increased price he has to pay the dealer. It is true that the customer will grumble at this rise and eventually pay it just as surely as the "boss" grumbles at the wholesaler and buys from him. The dealer has his growl against the stock raiser, and he pastes heaven with his lamentations against the diseases, hard winters, and high-priced foods which prevent his pocketing all of the margin between his own prices of four years ago and those which he now gets from the same parties. All are complaining.

The packer felt what cattle cost him and he charged that extra burden to cost. Then he added his profit, and that is the price the butcher has to pay him. The butcher should, in turn, add this extra rise to his price and so sell to the customer. It is simple business. This will be more necessary in the near future, even for the unchangeable "boss" who never raised his prices no matter what the wholesale price of meat was, as beef will yet get a bit higher. Where are the cattle to

come from? The losses on the ranges during the last year have been severe. The losses have ranged from 10 to 50 per cent in sections of the North and Southwest. It is estimated that a total loss of 3,000,000 cattle has been experienced. Add the shortage to high feed and the two will not tend to lower the price of beef. The clover crop throughout the country has been badly injured, and, in the large area covered by the severe snows of last winter it has been entirely destroyed. The hay crop and the grazing after harvest time will be terribly shortened. Grassers will, therefore, have to be fed if they do not reach the market as blue-lean slabs. This necessary feeding to finish them will necessarily fetch grassers high. The tendency any way is to eliminate this class of beef.

We draw the marketman's attention to these conditions that they may the more readily see the importance of careful buying, and judicious selling. The cost must be added to a legitimate profit after all proper expenses have been added to cost, if the retailer desires to cut his money and a living out of his meat. Add every cost to a fair profit, then sell ahead.

NEW CALFSKIN OFFICERS.

The election of officers of the New York Butchers' Calfskin Association on Tuesday afternoon resulted in the re-election of the old officers. For the first time the Association has a vice-president. Aaron Buchsbaum, the important meat man at 523 Ninth avenue, was elected to this position. Mr. Buchsbaum adds strength to the excellent corps of officers. As the staff now stands it is: George Thomson, president; A. Buchsbaum, vice-president; H. Heinemann, treasurer; and Wm. G. Wagner, secretary. Mr. Dietz remains manager as before.

Cutting Heads and Feet.

The dealers decided finally to let the matter of cutting heads and trotters from lambs rest and worry the Board of Health about it, inasmuch as the board was only directing the observance of a law which is in existence requiring this to be done. The small stock slaughterers will simply weigh the carcass, cut off the feet and heads, charge the cost of this loss of weight back upon the lighter carcass and let it go at that. This is simply business. All of the slaughter-houses at once put the new order into effect. The disposition is to comply pleasantly and do business.

"INVINCIBLE" ICE SCALE.

MADE IN TWO SIZES:

No. 3. Weighs 300 lbs. by 5 lbs.

No. 4. Weighs 400 lbs. by 5 lbs.

This Scale meets all the requirements demanded by the "Ice Trade." It is accurate and unbreakable. It relieves all strain. Both the ring at the top and hook are swivel. The dial is nickel with black figures. It is used and highly endorsed by the largest ice companies.

Patents pending.

Write for prices.

PELOUZE SCALE & MFG. CO.
133-139 S. Clinton St., CHICAGO.



A BIG SYNDICATE MARKET.

The Cushman syndicate, it is stated, will go on with the original plan to erect a 120x124 feet brick and terra cotta market building at Eighth avenue and Forty-ninth street. A company was formed some time ago to erect this market. It was in the hands of a firm of lawyers on Broadway. This fell through. Then a new company was formed by the same attorneys. The stock for this company was actually engraved when the parties were burned out. The matter rested there. David W. King, the architect on Fifth avenue, was the architect through all of these tribulations. He is the architect of the present syndicate, and the market will be built according to his plans. The property belongs to the Cushman estate and is on the southwest corner of Eighth avenue and Forty-ninth street. It has been excavated for this purpose for some months. The structure will be a handsome one, and, when completed, will cost about \$200,000. If present arrangements are carried out the American Meat Market Company will have a lease of the place and run it. This markethouse will be one of the handsomest and best equipped in the country. Architect King showed the modified plans of it to a representative of The National Provisioner some time ago. The plans for the structure were filed on Tuesday, and the work upon the building will begin without much delay. The West Side needed a good market house.

Goose-Liver and Poultry Horse Meat.

A provision merchant of Paris, France, has been jailed for selling "pate de foie gras." When a man sells goose-liver—pots of it—which is only horsemeat, he ought to be jailed whether his name is Perdon or Worse. This same fellow also sold patties of duck, hare, quail, pheasant, and lark in pots and jars. These delicacies had also as their foundation horse meat, and not the best broncho steer at that. He made his own choice viands in this way. Perdon went to the knackers' yards, purchased the old horses and slaughtered them. He then boiled the flesh, enriched it by mixing in a little pork fat. Then he spiced up the mixture with ginger, nutmeg, and cayenne pepper until the horse had been lost in the new fabrication. It might then be labeled anything and he labeled it at will. To complete this highly-spiced melange the maker poured a bit of eau de vie or rum kirsch over it and potted the product for the market. Under the general abbreviation "M. H." Perdon sold his "honorable mention" stuff until the court had him in the toils. Then he said "M. H." meant "melange hippophagique." For this commercial fraud M. Perdon got eight months in jail. Now every one who eats a French goose-liver preparation will naturally squirm at the thought that he has buried a piece of horse. Even the renown of the French cooks and the tastiness of their dishes will not entirely eradicate the anti-hippophagie feeling even in Strasbourg, which is famous for its goose-liver.

The European, and the French especially, with their delicate flavors and bouquets foil our judgment and mask our condemnation by scenting and teasing our senses, and feed us all sorts of "improper" dishes. Then these same virtuous fakirs of foods tell Americans that the United States alone must be held at a distance because of unholy compounds. France is full of imitation and real food and drink frauds. They are on a commercial basis and work the market for what it is worth.

The Retail Butchers' Association of Holyoke, Mass., held its fifth reception and dance at the town hall of that city last week. There was a concert before the dance. Later in the evening a grotesque and funny cake walk

was introduced. Those who should be thanked for the fun and pleasures of the evening were: George F. Cullen, president; Louis Demers, vice-president; Robert Ramsden, secretary treasurer; floor director, Louis Prunier; aids, W. M. Menard, L. Terrian, M. S. Titus, F. A. Laduke, J. P. Sullivan; reception committee, Ed Pelessier, H. Baldwin, John Kennedy; committee of arrangements, D. Williams, F. Metcalf, J. Taylor; honorary committee, Ulric Perrault, E. L. Lyman, R. F. Kelton, Valerie Ducharme, O. G. Fiske, W. J. Mahoney, D. M. Foley, L. F. Brown, Ed Curran, W. D. Sullivan, James Moriarity.

CURIOUS CHINESE FOODS.

There will be an interesting exhibit of Celestial provisions and food supplies at the Chinese Fair to be held in the Palm and Roof Gardens of the Grand Central Palace, Lexington avenue and Forty-third street, New York City, beginning June 1 next and continuing until the end of the 10th of June.

It is wonderful what the world eats. We who live among packinghouses, processes and the interminable whirl of machinery seldom stop to think what of the primitive native and the ancient Mongolian who follow science after a different manner and eat what are to us queer foods.

Among the most interesting of the many novel features to be presented in the Chinese Fair will be a Chinese food show, with specimens of fish, dried, prepared and preserved vegetables, fish, meat, fruits, pastry, etc.

An eminent food authority in the country has given much attention to Chinese vegetables, provisions, etc., and has stated that many of them could well be utilized by American cooks and housewives in the preparation of palatable and delicious dishes.

At Steinway and Astoria, L. I., there are two Celestial farmers engaged in raising Chinese vegetables and garden truck for the local market, and the importations of Chinese food supplies at our principal seaports aggregate vast proportions each year.

Among the goods in this line are: Abalone and Beche de Mer (dried fish), flat fish, shrimps, cuttle and shell fish, oysters (dried and in oil), chicken and duck meat, hams, sausages, beans, fresh, prepared, preserved; beansticks, beancurd, bamboo shoots, dried and prepared; cabbages, fresh and preserved; fungus, lily roots, potatoes, peas, fresh and prepared; rice, seaweed, yams, salt turnip, black and salted beans, cucumbers, garlic, fresh and prepared onions and water potatoes. In delicacies, fruits, nuts, etc., are: shelled and unshelled almonds, chestnuts, dates, lichens, fresh and dried plums, water chestnuts, betelnuts, cocoanuts, carambolo, oranges, ginger, prepared and green; preserved lemons, dried and prepared lemon peel, ginseng, orange peel, dried and prepared; melon seeds, apricot sauce, pineapples, peaches, taro, green and prepared, dried and prepared mushrooms, olives, tapioca, ban sauce, bean jam, duck legs, and feet, dried and in oil, canned frogs, roast geese in oil, and preserved insects. Other goods in the list are bird's nest, eggs, salt eggs, soy, a sauce answering the same purpose as our salt, brown and white sugar, sugar cane, vermicelli, rice, tea and wines. The Chinese canned and preserved goods are numerous.

With the food show and its specimens of the above named goods, other features of the Chinese Fair will be a Chinese village, with its dwellings, stores and narrow streets, a restaurant, orchestra, Joss House, theatre, tea garden, Chinese tradesmen at work in their shops, drug store, loan exhibition of valuable Oriental art goods, a complete line of Oriental goods of every description for sale and faithful portrayal of Chinese manners and customs, costumes, their accomplishments in arts and science and many interesting phases and features characteristic of the "son of Confucius," as well as demonstrations of the progress in Western education and customs attained by the many Americanized Chinese in this country.

These cannot but interest the curious and the student, as well as the provisioner. Upon the whole this food show with its Oriental features will be entertaining to a marked degree.

New Shops.

Chris Marasas has opened a nice meat and provision store at 619 East Chase street, Pensacola, Fla.

L. F. Bassell will open a new meat market at Olyphant, Pa.

A. J. Hough has put up a new meat market building at West Main street, Batavia, N. Y.

Joe Wilson, lately with Rule & Wilson, will open a meat stall at No. 34 in the market, Knoxville, Tenn.

Mr. Kraft, the Bridgeport butcher, is putting up a meat market building at Berlin, Ontario, Canada.

John F. Gunning has ordered a complete market outfit from Chicago for his market at Ticonderoga, N. Y.

Hayes & Carlton have completed and taken possession of their new meat market at Greenville, N. Y.

Business Changes.

Frank P. Zimmerman has purchased the Palmer meat market at 708 Kansas avenue, Topeka, Kan.

S. A. Hill has leased the newly refitted meat market of N. H. Woodward, at Ludlow, Vt. Gilmore & Thiss, the Colfax, Ill., butchers, have bought a butcher shop at East Jefferson street, Bloomington, Ill.

Carlos Morgan has purchased the meat market of John Millen at Middletown, Conn.

J. A. McDonald has bought out the meat firm of McDonald & Johnson of which he was a member at Trinidad, Col.

C. L. Chapman has purchased the market business of A. L. Wetts at Union street, Trumansburg, N. Y.



Freeze-em is Healthful. It cannot be Detected, and does not destroy the Natural Flavor of the Meat.
Invented and Manufactured Only By
B. HELLER & CO.
CHEMISTS,
248-251-253 S. Jefferson St., Chicago
WRITE FOR DESCRIPTIVE CIRCULAR.

Local and Personal

** Charles N. Green shipped seventeen steers from LeRoy, N. Y., to Buffalo last week. They averaged 1385 pounds each, live weight.

** Extensive alterations will be made to Central Market, Atlantic City, N. J. This will greatly enlarge its capacity.

** Alfred Annis has opened his new meat market at Ashford, Conn. His market is on North street and the business outlook is so bright that he will put on a cart.

** T. R. Jones, who is with the Hammond Beef Co., at Utica, N. Y., received twenty-two homing pigeons from Fred C. Cook, of Boston, and released them for their homeward flight last Saturday.

** Burglars fossicked around East Williston, L. I., and finally broke into the butcher shop of J. Post, which is only about a hundred yards from the railway station. They blew open the safe with a charge of dynamite, and though they found no money, extracted deeds and mortgages, representing about \$50,000. The noise of the explosion shocked the town.

** Hide Dealer J. S. Thurman, of Baltimore, was hit by John Carter, who tried to convince the top of his head with a beer bottle that a purchase of hides from him was open to argument. Carter is a "culud" butcher in that city. A doctor put a curative on the ugly scalp gash and the mayor put the negro under \$250 bond. There the matter rests.

** Fire gutted C. A. Zapart's butcher shop at 73 North Third street, Brooklyn, Sunday afternoon. The shop was in a two-story frame building. The wind was driving the flame. Charles Murphy, of Wythe avenue, owned the structure. It was partially insured. Cause of fire unknown.

** A. S. Weber, the well-known Northwest side butcher, Chicago, died suddenly from heart failure in that city, while out driving with his wife and family near Lincoln Park. The horse stumbled, and fell. Mr. Weber got up to assist the animal to his feet. Then he collapsed. His death occurred on Monday. Mr. Weber was well-known in New York City. He was 60 years old and a native of Frankfort, Germany.

** E. M. Bell, manager for Swift and Company at their West Harlem market, was sick during the week with tonsillitis.

** C. C. Freeman, the Cudahy Packing Company's manager at Scranton, Pa., was in New York City on Saturday. He met many of his old metropolitan friends and said goodbye again on Sunday.

** Sam Prager has been made manager of Swift and Company's Center Market, vice Homer Stone resigned.

** That was a dastardly crime which branded letters upon the naked flesh of a helpless 4-year-old child. The little boy was Morris Braf, son of Mrs. Braf, who runs a butcher shop at 41 Goerck street, New York City. The infamous act was perpetrated in a blacksmith shop in the neighborhood, where the little one was forcibly taken, stripped and the cruelty of burning the letters "Cihng" into his tender back was done. The punishment should fit the crime.

** H. C. Learn, manager at Swift and Company's Brooklyn market, was sick two days last week with an ulcerated sore throat. He is out again. The last week was severe weather on sore throats.

** M. McInerney, formerly assistant sheep salesman for Swift & Company, at their Fort Green sheep market, has been transferred to the company's Ninth street market, Jersey City. He will be in the small stock department.

** Sayles, Zahn & Co.'s wholesale plant at 126 to 130 Sixth avenue, had a fire scare Saturday afternoon. The fire started in a rear refrigerator which was being put in, worked its way to the closets, ate off the lead pipe and started a flood. The total loss is not over \$1500.

** James Schaek, the superintendent of construction of the Swift Packing Company at Kansas City married Miss Artie Bellows, the daughter of Mr. and Mrs. Frank Bellows, of Maryville, Mo. The ceremony took place Wednesday of last week.

** The inspectors scouring around Maspeth, L. I., aided by information and their noses found a horse abattoir. As a result George Karlo and John J. Leissner were taken in. The natives were unaware of the existence of such a house in their midst. The product seems to have been shipped to Brooklyn.

** The Cincinnati Abattoir Employees Beneficial Association, of Cincinnati, has been incorporated in Ohio.

** Burglars out Omaha-way call up Central to see if the wire is working. If not, they use the late hours at night to call on butcher shops, break in and help themselves. Peter Besen, the butcher at 2804 Farham street, Omaha, Neb., has contributed hams and other viands frequently to these night marauders of late.

** G. W. Sturgis, the Washington market butcher, lost a horse on Tuesday in a peculiar manner. His cart was standing down at a lower street when something frightened the animal. It bolted up to Greely Square and jumped on the iron fence in front of the Savings Bank at Broadway and Thirty-second street, where it was impaled. The unfortunate horse broke his leg also, and had to be shot.

** Mr. Clark, of Armour & Co.'s general staff, at Manhattan market, who has been sick for some time, was very low on Tuesday.

** The Kingan Provision Company at Manhattan market is putting the bright side to the 200 feet of wall which faces Thirty-fourth street. A bright light color is being put on. This is one of the improvements which General Manager McVickar had in mind. This will certainly freshen up the face of the famous old meat mart.

** The Armour Packing Company is installing the Fitzgerald "tree" system of smoking hams at the Manhattan market place. New frames are being put in the doors of the smokehouses. In the meantime the extensions on the roof are gradually going up so as to give more room and greater smoking facilities.

** Emil Muench, the butcher at 1056 Second avenue, secured judgment against a dressmaker for \$56 worth of meat. A ferocious fox terrier at the woman's house arrested judgment or delayed attachment by incontinently routing two city marshals who went on Tuesday to serve the attachment. After baiting the dog with meat the officers attached the recalcitrant canine, a bicycle and went away smiling at the gas man who had been thrice chased from the premises by this same impounded pup.

** Harry Hallett, assistant salesman at Swift and Company's Gansevoort market, is confined to his house with a bad case of gripe. It is expected that he will be out again soon.

Stole the Rig and Load of Meat.

S. Rothschild, the butcher at Seventh avenue and Twenty-seventh street, had an expensive experience Friday of last week. At

the corner of Read street and Broadway he left his horse, wagon and meat to run down in a basement to deliver his order. When he came up the whole outfit—horse, wagon, and meat, valued at \$700—were gone. Some thief drove the team away. There was about \$30 worth of meat in the conveyance. About 11 o'clock that night the horse and wagon were found on Hester street, where they had stood all day; no one knowing whose rig it was, the meat was of course gone, the thief doubtless making the best use of it he could in the short time at his disposal.

This is Mr. Rothschild's second experience in this line. About two years ago some scoundrel stole some meat from the front of his shop. This, in connection with recent thefts, indicate the existence of a meat and provision "push." The meat man was lucky to get his horse and cart back.

The Butcher's Committee Calls.

A committee of three from the Retail Butchers' Association, headed by Secretary Charles Young, has been calling upon the wholesalers during the last few days in regard to the shrinkage in the box weight of pork loins, and in regard to dealers selling to hotels, restaurants, etc. They were courteously received and patiently listened to on all points. The general managers went over the whole ground with the committee. One concern even went so far as to show the committee a circular letter sent to all of the branch houses asking for written reports as to their transactions. This was done weeks before the committee called. The cause of this was because of a hint that a manager of the company had sold to a private house. The committee was pleased to see that so important a house had so acted upon its own motion. There was no fault to find.

As to the pork loin shrinkage, the committee found that although the packers sold pork loins at per pound "box weight" they were willing to make up a net shrinkage of a lot. The Armour Packing Company weighed some boxes for a representative of The National Provisioner. The loins were taken from the boxes, placed on the scales and the result noted. One box fell short one pound. Some boxes go over, some weigh even, and others fall short. It is the net loss on a lot which the packers express a willingness to make up even in the face of the fact that the loins are sold "box weight." This is just to the butcher who buys by the pound, and sells by the pound. Any shrinkage is a dead loss to him. The fact that such a friendly feeling exists between the retailer and the dealer is an earnest of the ease with which these little matters of friction can be smoothed out of the way.

The complaint against the street dealers makes the other live issue before the butchers. This is, however, with the city authorities. The city meat laws should be strictly enforced against all parties.

RAIDING THE BROOKLYN STREET DEALERS.

The Board of Health made a raid upon the Hebrew meat markets along Osborne and Belmont avenues in the Brownsville district, Brooklyn. Inspector Metcalf conducted the disinfecting raid on Friday last. The dumps which stretch from Rockaway avenue and Dumont avenue to Riverdale were disinfected. This locality has been very disagreeable. The meat people who have so long violated the law which prohibits the display of meat on the sidewalk were quite disconcerted by this raid of the health officers. The first raid the day before found 200 dealers doing business in violation of the law. Friday being Hebrew market day intensified the new order of things. The activity of the meat inspectors throughout the metropolitan area indicates that some plan is on foot and is being directed by some earnest hand to abate these nuisances.

DARLING BROTHERS' COMPANY,

405 W. 14th ST., Near 14th St. Station of 8th Ave. "L."

TELEPHONE No. 3465-18th ST. Convenient Surface Cars All Over.

DEALERS IN
Choice City Dressed Beef,
Mutton, Poultry, Game, Tongues, Hams, Bacon, Lard, &c.

Mortgages, & Bills of Sale and Business Record

Butcher, Fish and Oyster Fixtures.

The following Chattel Mortgages and
Bills of Sale have been recorded
up to Friday, May 26, 1899:

BOROUGH OF MANHATTAN.

Mortgages.

Simon, S., 132 Park ave.; to R. Katt-warser (filed May 19)	\$775
Treintwein, John, 303 Irvington st.; to C. Bloyer (filed May 22)	150
Schoenwald, Chas., 91 3rd ave.; to Margt. Schoenwald (filed May 23)	1,000
Stenger M., 429 E. 14th st.; to J. Levy (filed May 25)	490

Bills of Sale.

Peiser, Chris., 155 10th ave.; to P. Col-lins (filed May 19)	2,500
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BOROUGH OF BROOKLYN.

Mortgages.

Fox, Joseph B., Blythebourne, to T. F. Fox (filed May 20)	\$400
Keller, William, 355 7th ave.; to Albert C. Tretze (filed May 25)	\$800
Jones, Alfred R., 568 5th ave.; to Eliza Jones (filed May 26)	150

Bills of Sale.

Ward, Jerome C., to Charles E. Turner & Joseph S. Engel (filed May 19)	\$625
Stein, Solomon, Sutter ave. and Wat-kins st.; to Rosa Stein (filed May 23)	50
Eaton, Anton, 401 Central ave.; to J. Levy (filed May 26)	50

Grocer, Delicatessen, Hotel and Restaurant Fixtures.

The following Chattel Mortgages and Bills of Sale have been recorded up to Friday, May 26, 1899:

BOROUGH OF MANHATTAN.

Mortgages.

Metzner, R., 2088 Madison ave.; to M. E. Burharno (filed May 19)	\$125
Belinky Bros., 138 E. Houston st.; to M. Belinsky (filed May 19)	150
Fitzpatrick, Wm., 147 W. 42nd st.; to Mich. Fitzpatrick (filed May 20)	1,616
Shears & Dally, 270-272 E. 39th st.; to M. G. Osgood (filed May 20)	2,149
Deutsch, Max, 126 2nd ave.; to C. Bab-cock (filed May 22)	275
Oehlers, John, 724 Washington st.; to J. H. Van Dohler (filed May 23)	1,000
Herrisohn, P. W., 322 E. 32nd st.; to J. Ruppert (R.) (filed May 25)	1,500
Miller, Rebecca, 72 Bayard st.; to S. Baron (filed May 25)	115
Hillmann, Fred, 383 1st ave.; to Chas. Hillmann (filed May 25)	800
Cornell, F. B., 721 E. 177th st.; to R. Hill (filed May 25)	1,608

Couqueron, C. O., 1610 1st ave.; to R. Hill (filed May 25)

Bills of Sale.

Kahle, W. F., 931 Amsterdam st.; to R. Chapman (filed May 19)

Williams, B. E., 238 9th ave.; to A. Hensel (filed May 20)

Zimmerman, S., Spuyten Duyvil, to J. Berkbaum (filed May 23)

Greenbaum, Adolph, 278 E. Houston st.; to Fannie Greenbaum (filed May 23)

Klein, B., 273 E. Houston st.; to R. Tagenbaum (filed May 24)

Englemann, E., 486 Columbus st.; to J. P. Kennedy (filed May 24)

Marshall, Hy., 22 West End ave.; to C. Howes (filed May 25)

Koulick, Nathan, 312 E. 4th st.; to Ida Koulick (filed May 25)

BOROUGH OF BROOKLYN.

Mortgages.

Schoenig, Louis, 49-51 Flatbush ave.; to Lizzie Schoenig (filed May 19)

Lyons, Lewis E., 54 Fulton st.; to E. R. Biehler (filed May 20)

Manning, Alfred W., Coney Island; to E. R. Biehler (filed May 23)

Torchia, Ernst, 353 Park ave.; to Caroline Schmell (filed May 23)

Bill of Sale.

Specht, Lina, 33 Jamaica ave.; to Christian Haensel (filed May 19)

HUDSON COUNTY.

Mortgages.

Lebers, August, to E. F. Grabendunkel

Bill of Sale.

Keoh, Joseph, Bayonne; to A. R. Pet-tenos

ESSEX COUNTY, N. J.

Mortgages.

Appleroth, Sam'l, to Sam'l. Ehrenhalt

Montie, Chas. J., et al., to Wilber W. Tillman

BUSINESS RECORD.

ARKANSAS.—Boyd & Co., Little Rock; meat market; sold out.—Geo. Bouillion, Little Rock; meat; chatl. mortg., \$382.—Geo. S. Tambyn, Pine Bluff; cattle; chatl. mortg., \$20, released.

COLORADO.—D. C. Williams, Denver; meat; assigned.

CONNECTICUT.—Getchell & Comstock, New London; meats; dissolved; succeeded by Harvey B. Getchell.—Mrs. K. (Jacob) Schaub, et ux. R. E. mortg., \$300.—Bristol & Jewell, Stratford; market; W. B. Bristol, individually, R. E. mortg., \$1,200.—Mrs. Annie (C. A.) Lester, Willimantic; meats, etc.; gives warranty deed, and R. E. mortg., \$9,000.

INDIANA.—Henry O. Trubenbach, Fort Wayne; meat; will continue S. D. Lewis, Geneva; meats, etc.; sold out.—Walters & Darrach, Portland; meats; out of business.—Chas. Stewart, Shoals; meat, etc.; out of business.—G. C. Kulmer, Greentown; butcher; mortg., \$228.—M. C. Shea, Indianapolis; meats, etc.; released R. E. mortg.,

\$600.—Robert Beechman, Muncie; meat; cancelled chatl. mortg., \$200.

KENTUCKY.—Pfaffinger & Co., Louisville; pork packers; Mrs. Edward Pfaffinger, withdraws; Style continued by Wm. L. Pfaffinger.—Schlasser & Sandman, Covington; meats; Albert Schlasser et ux., R. E. deed, \$1.

MAINE.—Frank D. Daley, Bangor; res-
taurant; assigned.—Bethel Dairying Co.,
mmfrs. butter; sold out.—W. Leslie San-
born, Bridgton; provisions; mortg., R. E.,
\$350.

MASSACHUSETTS.—Quirk & Bell, Bev-
erly; provisions, etc.; dissolved; Quick retires.
—Skinner Arnold, Boston; wholesale beef;
E. Watson Arnold, dead.—Calvin R. Butt-
wick, Haverhill; provisions; out of business.
—Lowell Packing & Provision Co., Lowell;
wholesale provisions; capitalized under above
style.—Joseph O. Braun, Lynn; provisions;
sold out.—Carey Libbey, Salem; provisions;
assigned.—Davis & Minckler, Worcester;
meats, etc.; succeeded by Davis & Holt.—
Leo L. Mandelby et al., Boston; restaurant,
etc.; chatl. mortg., \$3,750.—Robert B.
Foley, Cambridge; provisions, etc.; chatl.
mortg., \$600.—Oliver H. Lane, Chartley;
butcher, etc.; sold R. E., \$1.—Jos. A. Pepin,
Fitchburg; restaurant; chatl. mortg., \$711.
—I. O. Dahley, Orange; meat; chatl. mortg.,
\$170.

MICHIGAN.—R. Van Zwuewenberg,
Holland; meats, etc.; succeeded by C. De
Keyzer.—Wm. A. Coleman, Kalamazoo;
wholesale meats; chatl. mortg., \$3,500.

NEW HAMPSHIRE.—Olena & Goyette,
Nashua; provisions; offering 15 per cent.—
Reed & Arlin, Concord; provisions, etc.; Har-
lin A. Arlin, individually, chatl. mortg., \$1,
500.—Alfred L. Gadbois, Manchester; provi-
sions, etc.; R. E., etc., mortg., \$3,000.—Uli-
rich Ducheneau, Nashua; provisions; attached
and sheriff in possession.

NEW YORK.—Henry Weidig, Nyack;
butchers; out of business.—Joseph Traut-
man, Buffalo; meats; rly. mortg., \$6,500.—
James Flanagan, Port Richmond; meats; bill
of sale, \$3,000.

OHIO.—John Schaefer, Toledo; meat; sold
out.—Geo. Dannefelder, Cleveland; meats;
R. E. mortg., \$1,600.—Tim Foley, Hillsboro;
restaurant, chatl. mortg., \$1,910.—O. A.
James, Lebanon; butcher; Mary E. and O.
A. James, R. E. mortg., \$1,000.—Wm. Alt-
valer, Springfield; meat; R. E. mortg., \$1,
500.

PENNSYLVANIA.—Ross & Hayes, Phila-
delphia; meat; dissolved.—Fred Hug, Scranton;
meats; judgt., \$400.

RHODE ISLAND.—Marcus Cohn, Prov-
idence; market; filed voluntary petition in
bankruptcy.

UTAH.—Blamires, Stewart & Smith, Kays-
ville; meat; dissolved.

After the "Bobs."

The "bob" veal inspectors are beginning to
feel like a live wire under the sellers of "dean-
cons" "an' sich." In Port Jervis, N. Y., the
state officers slipped out, searched a milk
train and made prisoners of two "bob" calves
which were ready for shipment. They had
been put on at a Delaware division station on
the Erie system. The carcasses were for-
warded to New York by the inspectors.

WATCH THIS SPACE.

*This space is reserved for further description of the Ice-Making
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See description of Lewis Ice Machine in
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Choice prime steam.	5.07½ a
Prime steam.	5.05
Neutral.	6½ a
Compound.	4½ a

STEARINES.

Oleo-stearines.	a 5%
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OILS.

Lard oil, Extra.	a 40
Lard oil, Extra, No. 1.	a 37
Lard oil, No. 1.	a 29
Lard oil, No. 2.	a 27
Oleo oil, "Extra."	a 8½
Neatsfoot oil, Pure.	42½ a 45
Neatsfoot oil, Extra.	a 35
Neatsfoot oil, No. 1.	a 28
Tallow oil.	a 40

TALLOW.

Packers' Prime.	4½ a 5
No. 2.	3½ a 4
Edible Tallow.	4½ a 5

GREASES.

Brown.	3 a 3½
Yellow.	3½ a 3½
White, B.	3 a 3½
White, B.	3½ a 3½
Bone.	3½ a 4

BUTCHERS' FAT.

Rough shop fat.	1½ a 1½
Superior or black fat.	1½ a 2
Suet.	a 3
Shop Bones, per 100 lbs.	a 30

COTTONSEED OIL.

P. S. Y., in tanks.	a 25½
Crude, in tanks.	a 22
Butter oil, barrels.	20 a 30

FERTILIZER MARKET.

Dried blood, per unit.	1.80 a 1.85
Hoof meal, per unit.	1.40
Concent. tankage, 15 to 16 p. c. unit.	1.50
Unground t'k'g, 10 to 11 p. c. per ton.	16.00 a 17.00
Unground t'k'g, 9 & 20 p. c. per ton.	15.00 a 15.50
Unground t'k'g, 8 & 20 p. c. per ton.	13.50
Unground t'k'g, 6 & 35 p. c. per ton.	13.00
Ground raw bones.	23.00 a 24.00
Ground steamed bones.	19.00 a 20.00

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Horns No. 1.	\$190 a \$205 per ton 65-70 lbs. av.
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PACKERS' SUNDRIES.

Pork loins.	6½ a	6½
Pocket pieces.	a	4
Tenderloins.	13 a	14
Spare ribs.		3½
Trimmings.		3½
Boston butts.		4½
Cheek Meat.	2½ a	3

CURING MATERIALS.

Tenderloins.	15 a	15½
Pure open kettle.	a	4½
White, clarified.	4½ a	5
Plantation, granulated.	5½ a	5½

COOPERAGE.

Barrels.	a	85
Lard tierces.	a	97½

Friday's Closings.

TALLOW.—On Friday the melters continued asking 4½c for city; possibly 4 11-16c would have bought a limited quantity, while 4½c would have been paid. The position is quite strong. The contract deliveries all went in at 4½c, as the basis of the last sale. London private advices are strong, with Australian there up to 25s 3d, an advance of 3d. From Chicago reports are of 4½c bid for prime packers and none to be had at even 5c.

COTTONSEED OIL.—On Friday the position of the market was no way changed from the situation in our review for the week.

* The Agricultural Department of New Zealand has made arrangements to the effect that all meat exported will be inspected and stamped by veterinary surgeons in the employ of the department.

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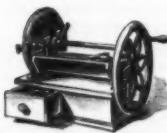
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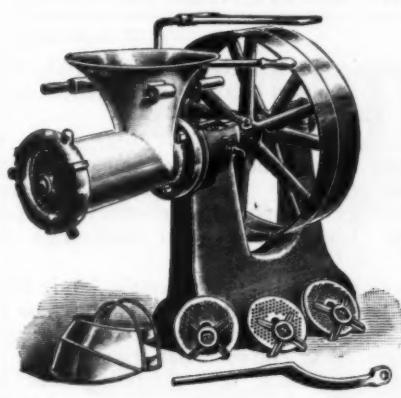


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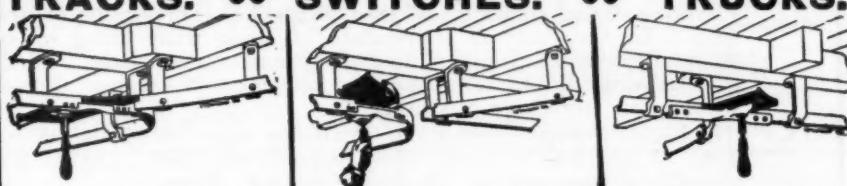
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- IX.—FILLERS.—General information. Materials used. Methods of preparing them. A substitute for starch. How prepared and used. List of fillers employed in sausage-making. Method of mixing. Hints.
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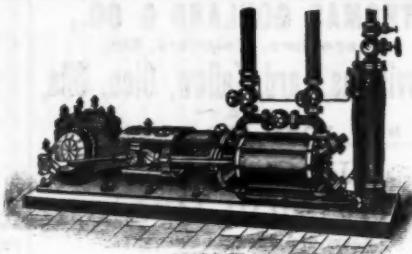
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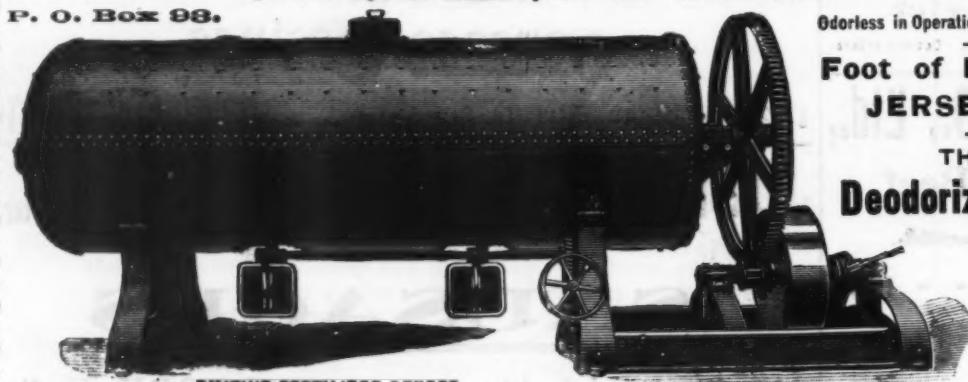
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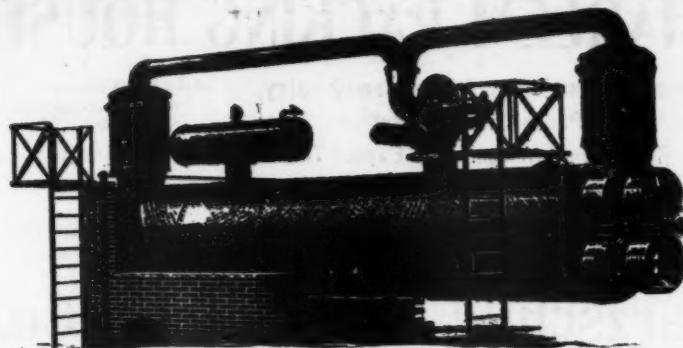
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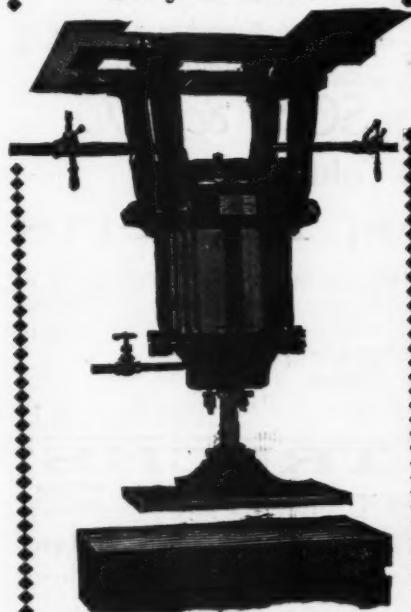
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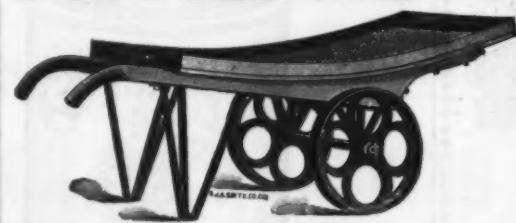
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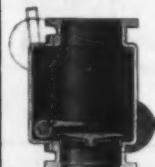
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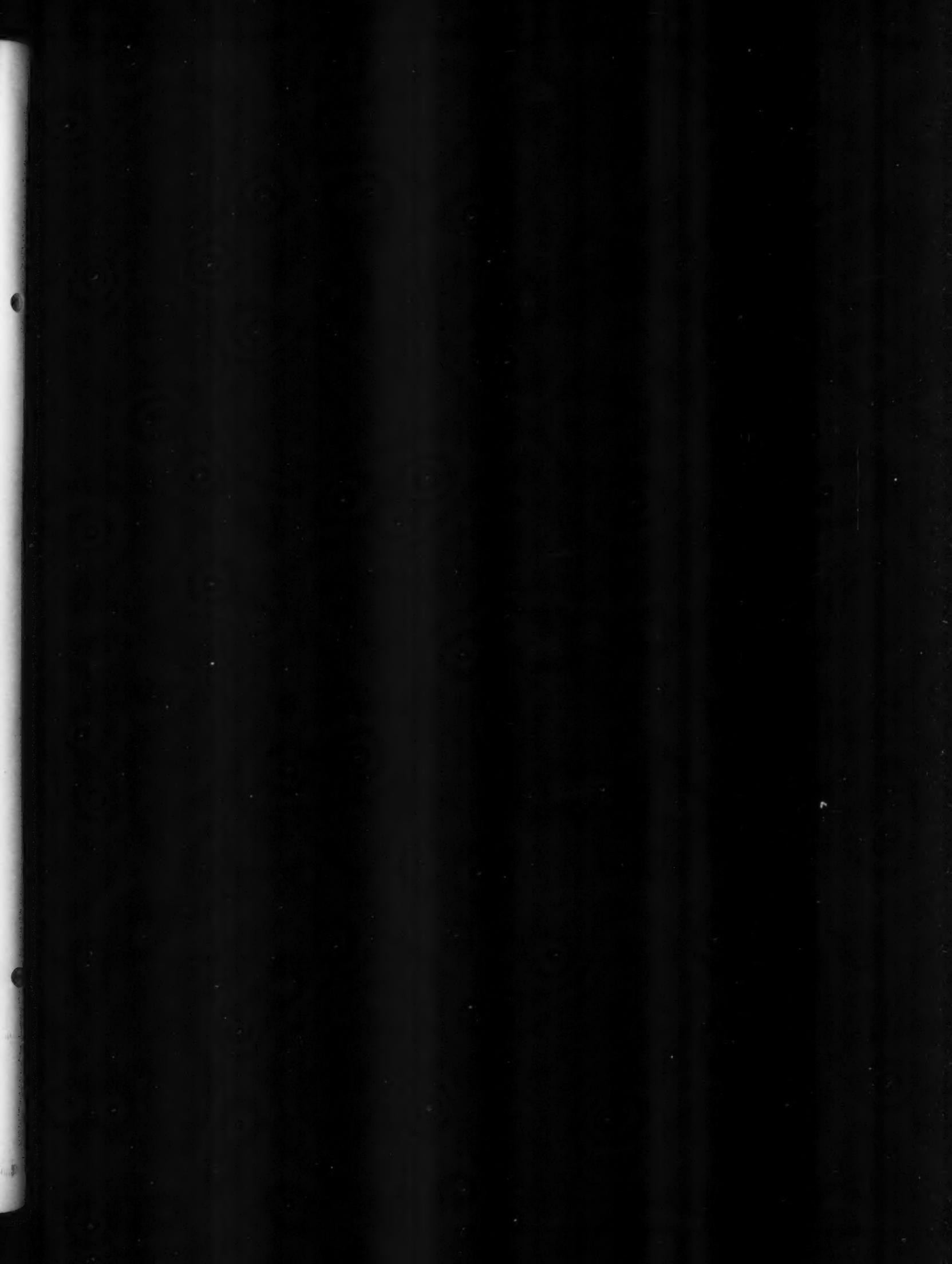
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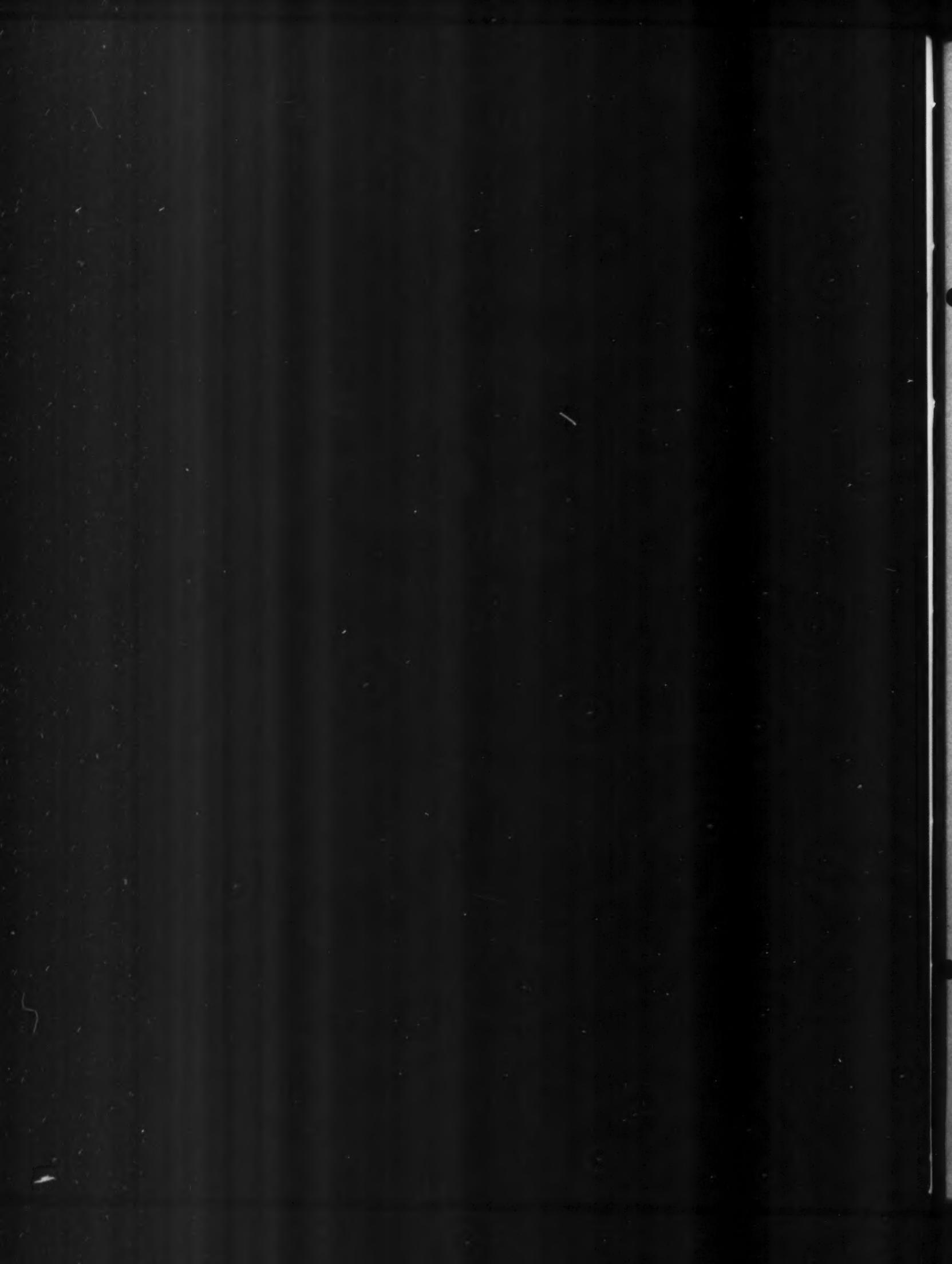
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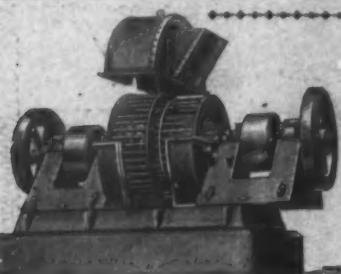
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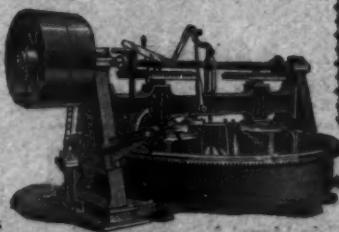
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